

MOTION PICTURES

available for loan
to the

PUBLIC SCHOOLS OF NEW YORK CITY



Department of Public Education
American Museum of Natural History
77th Street and Central Park West
New York City

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FOREWORD TO TEACHERS

The value of motion picture films in visualizing many school subjects is recognized by educational authorities, but without close correlation between the film and the topic under discussion, there is always the danger that the film showings in a school may be considered more in the form of entertainment than a true educational aid. With the desire to help teachers in achieving this correlation, the Department of Public Education in the American Museum of Natural History has prepared this new form of catalogue for its films.

The first section of the catalogue contains a list of the films classified according to subject. Each film is accompanied by a short description of the topics covered. In case a film is useful in more than one subject the description is given only once, but cross references are made under other headings where the film may be listed, to the page on which the description appears. The second section of the catalogue contains elementary and high school divisions which list the films according to both grade and subject.

With this arrangement of the catalogue, teachers should find it easier to prepare a schedule of films to correlate with their subjects. The Department has found that the most satisfactory method of distribution comes through the use of schedules especially prepared in advance. However, films not previously reserved for another school, may be secured on short notice.

The American Museum of Natural History lends these films free of charge to any public school in greater New York having a standard motion picture machine and a licensed operator. Deliveries of the films to and from the schools will be made by the Museum messengers. The borrower will kindly fill out and return with the film, the report card supplied.

Films designated for "MUSEUM USE ONLY" cannot be lent outside of the building but will be shown, upon special request, to school groups in the Museum auditorium.

No admission charge is to be made to any school or auditorium by the person borrowing any of these films.

The Department endeavors to keep its films in perfect condition. Each reel is carefully gone over by a competent inspector after each loan so the films always leave the Museum ready for use in a standard width projection machine. In return, the Department requests the users of the films to see that their projection machines are in proper condition and are operated by a competent person.

Among the films listed in this catalogue are those deposited with the Museum by the United States Bureau of Mines, the Canadian Government Motion Picture Bureau and the Consolidated Gas Company. These particular films are available for use in any school, church, or business organization in New York City and the surrounding vicinity upon payment of transportation charges.

Requests for application blanks for loan of films or for information may be addressed to

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SECTION I

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I. BIOGRAPHY

- BENJAMIN FRANKLIN**.....1 Reel
Born January 6, 1707, in Boston, Mass. Helping father make candles. Incident of "Don't pay too much for your whistle." Franklin entering Philadelphia with loaves of bread under arm. The girl who laughed at him and later became his wife. In 1729, he acquired the Philadelphia "Gazette" and three years later obtained the first charter for a public library. Scenes at University of Pennsylvania, established through Franklin's efforts. Was Chief Agent of the United States at the Court of France and was first Postmaster General.
- GEORGE WASHINGTON**.....1 Reel
February 22, 1732-April 30, 1789. Bridges Creek, Va., where Washington was born. Old elm at Cambridge where he took command of Continental Army. Scenes at Valley Forge and incident of Jefferson encouraging Washington. Sub-treasury in New York where Washington took oath as first President, and his last years at Mount Vernon, his beautiful estate in Virginia.
- JOHN BURROUGHS**.....1 Reel
This film gives views of the famous naturalist and his family at Riverby and Slabsides.

II. BIOLOGY

- ALASKAN MOOSE (For description see page 32).....1 Reel
- AN ADVENTURE IN TRIPOLI.....½ Reel
 "Tripoli" is a powder used in polishing precious stones. A boy brings a bottle of tripoli to the Museum to have it analyzed. Through a microscope he sees the tiny skeletons of which it is composed.
- ANIMALS OF INDIA (For description see page 32).....1 Reel
- ANIMALS THAT LIVED WHEN THE WORLD WAS YOUNG.....½ Reel
 How fossil bones found imbedded in the earth are made up into complete skeletons. Restorations by Mr. Charles R. Knight. Animated cartoon of two dinosaurs.
- APES AND HORSES AT THE ZOO (For description see page 32).....1 Reel
- BARE FACTS ABOUT BEARS (For description see page 32).....1 Reel
- BENDING THE TWIG (For description see page 24).....1 Reel
- BEASTS OF PREY (For description see page 32).....1 Reel
- BETTER MILK (For description see page 24).....1 Reel
- BIRD AND ANIMAL LIFE OF YELLOWSTONE (For description see page 32)...1 Reel
- BIRD ISLANDS OF PERU (For description see page 32).....4 Reels
- CHICK HATCHING FROM SHELL.....½ Reel
 The "egg tooth" with which he pecks open the shell. His bedraggled appearance is lost as soon as his feathers dry.
- CIRCULATION IN EMBRYO CHICK.....1 Reel
 Microscopic views of the rhythmic beating of the heart and the flow of blood in the early chick embryo. Activity of the heart in culture.
- CUCKOO'S SECRET.....1 Reel
 An English cuckoo lays its eggs in the nest of a titlark family. The cuckoo eats a titlark egg. Baby cuckoos later crowd out the rightful owners of the nest.
- DEPTHS OF THE SEA.....4 Reels
 Spectacular pictures of sea life taken in Naples, Italy. Sea worms, fish, corals, sponges, mollusks, and crustacea. How a hermit crab finds a home. A battle between a lobster and an octopus.
- DIGGING UP THE PAST.....1 Reel
 (Courtesy of Canadian Government).
 A unique and instructive film showing the Badlands of the Red Deer Valley, Alberta, the most prolific field in the world for palaeontological research, and how dinosaurs are located and secured. The film also depicts the work of assembling the fossilized bones of prehistoric monsters at the Royal Victoria Museum, Ottawa.
- DRAGON LIZARDS OF KOMODO (Museum Use Only).....5 Reels
 A film showing the heretofore, semi-mythical giant lizards of Komodo, living remnants of a monster that lived in Australia during the Pleistocene Age. Also splendid pictures of the native life of the Dutch East Indies.
- DUCK-BILLED PLATYPUS OF AUSTRALIA (For description see page 33)....1 Reel
- DWELLERS OF THE DEEP (For description see page 33).....1 Reel
- ELEPHANT SEALS OF GUADALUPE ISLAND (For description see page 33)...1 Reel

FEATHERS (For description see page 33).....	1 Reel
FOREST AXIOM (For description see page 20).....	1 Reel
FOREST GUARDIAN (For description see page 33).....	1 Reel
FROGLAND (For description see page 33).....	1/3 Reel
FROM FOREST TO NEWSBOY (For description see page 20).....	1 Reel
GRAY SQUIRREL (For description see page 33).....	1 Reel
HOW LIFE BEGINS (Museum Use Only).....	4 Reels

This film begins with the evolution of life in the lowest type of animal life and leads up to mammals. First, are shown the cell animals, which reproduce by dividing. Then come the sea creatures, whose eggs are fertilized and divided into two parts. Then comes the butterfly. The caterpillar spins the chrysalis in which it hibernates and comes out a butterfly. The story of the frog, whose eggs are found in ponds. These are fertilized and then hatch into tadpoles, which later turn into frogs. With the chicken we notice the evidence of mothering the young, which is found in higher forms of life. The mother rat is also shown caring for her young, as is the cow for her calf. This whole film shows the story of life in a pleasing and instructive manner.

HOW QUEEN BEES DUEL TO DEATH.....	1/4 Reel
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Only one queen is permitted to live in each hive. The best and strongest queen kills the others.

HUNTING KANGAROOS IN AUSTRALIA (For description see page 33).....	1/2 Reel
HUNTING WHALES IN JAPAN (For description see page 34).....	1 Reel
INDIAN ELEPHANT (For description see page 34).....	1 Reel
INSECT LIFE ALONG NATURE TRAILS (For description see page 34).....	4 Reels
KNIVES AND FORKS OF THE ANIMAL KINGDOM.....	1/4 Reel

Jaws and teeth of the lion, the beaver, the elephant, and the shark. The horse-shoe crab and the lobster.

LIFE CYCLE OF THE OYSTER.....	1 Reel
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This film gives the newly developed method of oyster farming, the most valuable American fishery, by the artificially propagated spawn. Here is shown the whole process from the unfertilized ovum to the setting of the oyster. Body of oyster showing organs and heart beating. The gills. Reproductive tissue. Spawn leaving ovary when pressed. Microscopical oyster eggs and sperm. Formation of cell after fusion. Division of cells. The blastula stage. Formation of tissues and organs. Larvae at twenty-four hours, six days, and ten days. Methods of transferring larvae without loss. Development of byssus. Ready for planting on oyster farm.

LIFE HISTORY OF THE DUCK HAWK (For description see page 34).....	1 Reel
LIFE HISTORY OF THE PEARL.....	1/2 Reel

How the pearl is formed from layers of "nacre" secreted by the oyster about a grain of dirt. Drilling and stringing pearls for jewelry.

LIFE HISTORY OF THE SILKWORM.....	1 Reel
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Adult silk worm laying clusters of eggs on mulberry branch. Tiny larvae hatching from eggs. Growth of larvae. Spinning of the cocoons. Moth emerging from the cocoon. The Ailanthus silk worm. Close view of larvae. Close-up showing tube-like false feet. Spinning silk cocoon. Cynthia moth emerging.

MINNESOTA BIRD LIFE	1 Reel
A colony of Franklin gulls. The black tern and the black-capped chickadee. A catbird feeding its young. The mourning dove and the flicker feeding their nestlings by regurgitation.	
PIRATES OF THE AIR (For description see page 34)	1 Reel
PRICELESS GIFT OF HEALTH (For description see page 24)	1 Reel
PROTOZOA AND HYDROIDS	1 Reel
This film shows the living amoeba, hydroids, barnacles, ctenophore, obelia, fish eggs, and sea urchin larvae. Microscopic crustacea, annelids and mollusks.	
RARE ANIMALS AND TALE OF HARE AND TORTOISE (For description see page 25)	1 Reel
SEEDS AND SEED DISPERSAL	1 Reel
This film shows different varieties of seeds, their characteristics and how nature has provided for the propagation of its flowers. Over two dozen illustrations of various flowers and their methods of seed dispersal are shown.	
SEEING THE UNSEEN	1 Reel
Glass-blowing and the wax modeler. The malarial mosquito magnified, showing characteristics. The sea bottom and minute under-water life magnified many million times showing the exquisite formations and coloring.	
SNOWY EGRET	1 Reel
The nest in the swamp, the eggs, the feeding by regurgitation, shielding of young from harm, and the hunting of the egrets, with a lesson in humaneness.	
THROUGH LIFE'S WINDOWS	1 Reel
The structure of the eye as compared with that of a camera. Defects of the eye and how they may be corrected.	
TOAD TRAITS	1 Reel
An excellent film showing different varieties of toads, such as the Spadefoot, the giant toad of the West Indies, the plain Hop Toad, the Natterjack and the American Gray Tree Toad; close up views of the peculiarities of each and where they are found.	
TRAILING WILD ANIMALS IN AFRICA (For description see page 35)	7 Reels
TREE SLOTH'S GREAT-GREAT-GRANDMOTHER	½ Reel
Two boys at the Zoo are watching the tree sloth and the armadillo. They come to the Museum to see the fossil "Great-Great-Grandmothers" of these animals.	
WHERE DID YOU GET YOUR FACE?	½ Reel
The evolution of the human face. From Devonian fish through primitive reptiles and mammals. Comparison of apes and man. Human types.	

III. CHEMISTRY

CRYSTAL FORMATION.....½ Reel

Showing under a microscope how crystals are formed when certain liquids are evaporated. Pyrogallic acid, hydroquinone, sulphate of copper, etc.

MANUFACTURE OF ILLUMINATING GAS.....1 Reel

This reel takes one on a trip through the Consolidated Gas plant, showing in detail the process of manufacturing gas.

STORY OF ABRASIVES.....4 Reels (Courtesy of U. S. Bureau of Mines.)

Reel 1 shows how the power of Niagara has been utilized to generate electricity, how electricity is used in furnaces to make the carborundum crystals, and the crushing of the crystals into grains; also shows production of aloxite. Reel 2 shows the crushing of aloxite, the grading of carborundum into fine and coarse grains, how large and small carborundum wheels are made and a few of their uses. Reel 3 shows use of carborundum and aloxite wheels in making belt conveyers; putting suede finish on leather; grinding of rolls for rolling mills; grinding of buckets on hydraulic turbine; finishing of seams on kewpie dolls; finishing bathtubs; grinding various parts of automobiles, plowshares, harrow disks, steel saws, and railway-car wheels. Reel 4 shows use of carborundum wheels in the marble, stone, and granite trades, and in glass cutting; also manufacture of carborundum cloth and paper and sharpening stones and some of their uses.

STORY OF ALLOY STEEL.....4 Reels (Courtesy of U. S. Bureau of Mines.)

Reel 1 shows ferro-alloy storage bins, charging of pig iron into open-hearth furnace, test of bath made for carbon content, tapping of furnace, and pouring of ingots. Reel 2 shows ingots weighed and placed in soaking pit, hot rolling of ingots into billets in blooming mill, and shearing to size. Reel 3 shows inspection and chipping of billets, pickling and heating in continuous furnace. Reel 4 shows rolling of spring steel, rolling in 12 and 14 inch mills, cutting to proper length, inspection and shipment.

STORY OF ASBESTOS.....3 Reels (Courtesy of U. S. Bureau of Mines.)

Reel 1 shows mining and cobbing of asbestos fiber at Chrysotile, Ariz., burros hauling the fiber to storehouse, and separation of asbestos fiber from the rock; also the mine at Asbestos, Quebec, and the drilling, blasting and cobbing of rock carrying the asbestos fiber, loading of asbestos rock by steam shovel, and crushing, drying and sorting into different grades. The factory at Manville, N. J., where the various asbestos products are made is also shown, as are the new factory, power house, boiler and engine rooms, and switchboard at Waukegan, Ill.; the crushing and mixing of fiber, carding and making of asbestos yarn, the doubler machine where 48 strands of roving are condensed and wound on a spool, and the finisher cards where the lap is divided into small strands and wound on spools. Reel 2 shows the spinning rooms,

weaving of automobile brake linings and cloth, braiding asbestos tubing, rope winding, sheet packing, making gaskets, ring packing, the burning of magnesia limestone to obtain magnesia for making pipe coverings and boiler insulation, the making of asbestos paper and roofing. Reel 3 shows testing of asbestos roofing with blowtorch, applying asbestos roofing, making of asbestos shingles, making of transite asbestos wood and electrobestos.

STORY OF COAL (For description see page 28).....3 Reels

STORY OF COPPER (For full description see page 28).....10 Reels

a. Copper Milling.....Reels 6 & 7

At a mill and smelter, crushing of the ore, the treatment on concentrating tables, precipitation process, flotation mill and skimming of the graded ore are shown in detail.

b. Copper Smelting.....Reel 8

This film shows concentrates unloaded at smelter, scrapping of ore, method of tapping and further treatment in convertor, casting of copper, cooling of bars by water spray and preparation for shipment.

c. Copper Refining.....Reels 9 & 10

Unloading at the refinery, charging of furnace, air blast, testing of copper, in the tank room, pure and diluted copper, melting sludge into bullion bars, casting of pure copper into commercial shapes, cooling and inspection.

STORY OF DYNAMITE (For description see page 28).....2 Reels

STORY OF FIRE CLAY REFRACTORIES (For description see page 29).....4 Reels

STORY OF GASOLINE.....3 Reels

(Courtesy of U. S. Bureau of Mines.)

Reel 1 shows an oil field, a tank farm, pumping station pumping crude oil from tank farm to refinery; a map of the 60,000 miles of pipe line in the U. S., and a view of the oil refineries. Shows distilling of gasoline from crude oil and the removal of coke from the still. Reel 2 shows the chemical treatment of gasoline in agitators to remove impurities, and the final distillation. Shows conversion of gas oil into gasoline by the "cracking" process, which is distillation under high pressure. Reel 3 shows recovery of gasoline from natural gas by compression and condensation. Shows test laboratories to determine boiling point of gasoline and to develop and improve processes of distilling. Shows gasoline storage tanks with a capacity of 3,000,000 gallons, shipment of gasoline by barrel, boat, tank, car and tank truck, and its delivery to service stations.

STORY OF HEAT TREATMENT OF STEEL (For description see page 29)....2 Reels

STORY OF LEAD MINING AND MILLING (For description see page 30)....3 Reels

STORY OF LEAD SMELTING.....2 Reels

(Courtesy of U. S. Bureau of Mines.)

Reel 1 shows smelter at Herculeum, Mo., the mixing of concentrates and fluxes, the sintering (roasting) and the charging of the blast furnace, when the lead is smelted, and the hauling of crude lead to the refinery. Reel 2 shows the smelter of the Federal Lead Co. at Alton, Ill., and the roasting of concentrates in pots to drive off the sulphur, removal of impurities from the crude lead, running of the refined lead into molds, the lifting of the cold pigs from the molds, carrying them by electric buggies to storage piles or railroad cars, and views of the change houses and baths provided by the company to protect the health of the workers.

STORY OF LUBRICATING OIL.....2 Reels
(Courtesy of U. S. Bureau of Mines.)

This film begins with a general view of a typical refinery and shows the various parts of the refinery through which the oil passes until refined and packed for shipment. Animated drawings explain the theory of the processes employed. Large installations of machinery dependent on lubrication are shown; also the glass bearings and other equipment used to study the action of a lubricant in service. The film also shows the methods used to test the oil in its progress through the various processes so that its quality may be kept uniform.

STORY OF PETROLEUM (For description see page 30).....4 Reels

STORY OF SULPHUR.....2 Reels
(Courtesy of U. S. Bureau of Mines.)

Reel 1 shows by animated photography how sulphur is melted, 1,000 feet below the earth's surface by superheated water and is forced by compressed air to the surface where it is run into huge vats and solidified; also shows building of vats and blasting and loading of sulphur into cars. Reel 2 shows how sulphur is used—for drugs, fumigating and bleaching, in the preparation of dried fruits, in the rubber industry, in explosives, in the paper industry and for sulphuric acid.

IV. CIVICS AND EDUCATION

FOREST GUARDIAN (For description see page 23).....	1 Reel
MAKING OF AN AMERICAN.....	1 Reel

The story of Pete, an Italian immigrant, who met with ill fortune because of his ignorance of the English language. When later he learns English he becomes a success in his business and a leader of his people.

MONEY MAKING INDUSTRY (For description see page 28).....	1 Reel
OUR CITY—NEW YORK.....	3 Reels

(Courtesy of Department of Plant and Structures)

The City Hall, center of all activities of our Municipal Government, Board of Aldermen in session. School System, special busses for crippled children, open air classes. Department of Parks, May pole dances. Department of Correction, training prisoners in trades and agriculture. Police Department, traffic and marine divisions. Fire Department, training new men, motor apparatus to replace fire horses, fire scenes. Public Welfare Department, Welfare Island, Sea View Hospital. Department of Water Supply, Gas and Electricity, Kensico Dam. Department of Public Markets. Department of Plant and Structures, Brooklyn Bridge, Manhattan Bridge, Municipal Ferry. Removal of snow and other city waste. Tearing away old elevated on 42d Street, construction of new city subways.

PRICELESS GIFT OF HEALTH (For description see page 24).....	1 Reel
PLAY SAFE.....	1 Reel

(Courtesy of U. S. Bureau of Mines.)

The use of the motor car by doctors, fire departments, and workers in all walks of life is shown, as are scenes to demonstrate that accidents to more than 15,000 persons yearly are caused by careless drivers and pedestrians. The Chicago "Loop" at the crowded hour, with its well regulated traffic, a fire department truck rushing by, and children playing in isolated side streets for lack of play grounds are shown. The danger of automobilists passing on curves, "jay walking," speeding, careless and careful driving on a slippery road, railroad crossings, and defective brakes are also shown. The film ends with the statement that our President commends greater carefulness to both driver and pedestrian.

V. COMMERCIAL GEOGRAPHY

ALL ABOARD FOR INDIA (For description see page 15).....	2 Reels
APPLES OF ANNAPOLIS (For description see page 18).....	1 Reel
COFFEE INDUSTRY IN BRAZIL (For description see page 21).....	1 Reel
FLOODS OF FORTUNE (For description see page 18).....	1 Reel
FOREST AXIOM (For description see page 20).....	1 Reel
FROM FOREST TO NEWSBOY (For description see page 20).....	1 Reel
GLIMPSES OF SYDNEY (For description see page 16).....	1 Reel
HARVEST OF THE SUGAR MAPLE TREE (For description see page 18).....	1 Reel
LUMBERING IN BRITISH COLUMBIA (For description see page 18).....	1 Reel
LUMBERING IN EASTERN CANADA (For description see page 19).....	1 Reel
MANUFACTURE OF ILLUMINATING GAS (For description see page 7).....	1 Reel
MONEY MAKING INDUSTRY (For description see page 28).....	1 Reel
NEW NORFOLK AND DERWENT RIVER (For description see page 16).....	1 Reel
NORMANDY AND BRITTANY (For description see page 17).....	2 Reels
PANAMA CANAL (For description see page 21).....	1 Reel
PEARL SHELL INDUSTRY (For description see page 16).....	½ Reel
PERFUME AND WINE INDUSTRIES OF FRANCE (For description see page 17).....	1 Reel
PORTS OF FRANCE (For description see page 17).....	1 Reel
SCENES IN RUSSIA (For description see page 17).....	1 Reel
SCIENCE IN THE HOME (For description see page 28).....	1 Reel
SHEEP AND CATTLE RAISING IN AUSTRALIA (For description see page 16).....	1 Reel
STAFF OF LIFE (For description see page 21).....	1 Reel
STORY OF A CAN OF SALMON (For description see page 19).....	1 Reel
STORY OF ABRASIVES (For description see page 7).....	4 Reels
STORY OF COAL (For description see page 28).....	3 Reels
STORY OF COPPER MINING (For description see page 28).....	10 Reels
STORY OF DYNAMITE (For description see page 28).....	2 Reels
STORY OF GASOLINE (For description see page 8).....	3 Reels
STORY OF SULPHUR (For description see page 9).....	2 Reels
THROUGH OIL LANDS OF EUROPE AND AFRICA—GERMANY, FRANCE, SPAIN, MOROCCO AND ALGERIA.....	2 Reels
Oil field at Wietze, Germany and near Strassburg. Tankers at Havre, France. Shipping oil in Paris by barge on the Seine and by truck. Scenes in Madrid and Toledo. The Alhambra at Granada. Stripping the bark from cork oaks and transporting it to manufacturing centers. The Morocco seaport Ceuta, and the market place at Tangier. Fez, Oran, the Medjulah oil fields near Tliluanet and a Mohammedan burial place known as the Tombs of Holy Men.	
THROUGH OIL LANDS OF EUROPE—ITALY, HUNGARY, THE DANUBE AND RU- MANIA.....	3 Reels
Harbor of Naples and Mount Vesuvius. Oil fields south of River Po. Views in Venice. Views of a market place in Hungary. Soldiers and natives in festive costumes. Floating mills in Danube River. Trajan's road and the famous	

Iron Gates at end of the Kazan Pass. Oil transported on the Danube and Giurgiu, oil port in Rumania. Rumanian village wedding. Gypsies. Modern steel derricks at Balcoi. Hand-dug and hand-operated wells of the Bustenari field.

THROUGH OIL LANDS OF EUROPE AND AFRICA—POLAND, GREECE AND EGYPT...

4 Reels

Oil fields in Western Galicia. Transportation by steel tank-cars and primitive ways. Life of the Polish peasant. Athens. Views of the Acropolis and Parthenon. Egypt. Street scene in Cairo. Native industries. Camel train across the desert. Pyramids, the Sphinx, entrance to the tomb of King Tut-Ank-Amen. Luxor and Karnak. Oil tankers passing through the Suez Canal. Transportation of oil and delivery of gasoline and kerosene in Cairo.

VI. DOMESTIC SCIENCE

APPLES OF ANNAPOLIS (For description see page 18).....	1 Reel
BENDING THE TWIG (For description see page 24).....	1 Reel
BETTER MILK (For description see page 24).....	1 Reel
HARVEST OF SUGAR MAPLE TREE (For description see page 18).....	1 Reel
LACE MAKERS OF CENTRAL FRANCE (For description see page 17).....	2 Reels
MODERN GAS APPLIANCES FOR THE HOME.....	1 Reel
(Courtesy of Consolidated Gas Company)	

This film shows the uses of gas in the home. The gas lighting in place of lamps, or candles, the gas stove in place of the coal range, and so on, down to refrigeration by gas.

PRICELESS GIFT OF HEALTH (For description see page 24).....	1 Reel
STAFF OF LIFE (Wheat) (For description see page 21).....	1 Reel
STORY OF A CAN OF SALMON (For description see page 19).....	1 Reel

VII. GENERAL SCIENCE

CRYSTAL FORMATION (For description see page 7).....	½ Reel
DIGGING UP THE PAST (For description see page 4).....	1 Reel
FLOODS OF FORTUNE (For description see page 18).....	1 Reel
FOREST AXIOM (For description see page 20).....	1 Reel
FOREST GUARDIAN (For description see page 33).....	1 Reel
FROM FOREST TO NEWSBOY (For description see page 20).....	1 Reel
GEM CUTTING AND POLISHING (For description see page 23).....	1 Reel
GIANT IN FAIRYLAND (For description see page 33).....	1 Reel
JENOLAN CAVES OF AUSTRALIA (For description see page 23).....	1 Reel
KILAUEA'S LAKES OF FIRE (For description see page 23).....	1 Reel
LIFE HISTORY OF THE SILKWORM (For description see page 5).....	1 Reel
MAGIC GEMS (For description see page 23).....	1 Reel
MONEY MAKING INDUSTRY (For description see page 28).....	1 Reel
PEARL SHELL INDUSTRY (For description see page 16).....	1 Reel
PLAY SAFE (For description see page 10).....	1 Reel
POWER OF CLOUDS (For description see page 23).....	1 Reel
SCIENCE IN THE HOME (Matches) (For description see page 28).....	1 Reel
SEEING THE UNSEEN (For description see page 6).....	1 Reel
STORY OF COAL (For description see page 28).....	3 Reels
STORY OF COPPER (For description see page 28).....	5 Reels
THROUGH OIL LANDS OF EUROPE AND AFRICA—GERMANY, FRANCE, SPAIN, MOROCCO AND ALGERIA (For description see page 11).....	2 Reels
THROUGH OIL LANDS OF EUROPE—ITALY, HUNGARY, THE DANUBE AND RUMANIA (For description see page 11).....	3 Reels
THROUGH OIL LANDS OF EUROPE AND AFRICA—POLAND, GREECE AND EGYPT (For description see page 12).....	4 Reels
TREE SLOTH'S GREAT-GREAT-GRANDMOTHER (For description see page 6).....	½ Reel
WONDERFUL WORK OF WATER (For description see page 21).....	1 Reel
USES OF ILLUMINATING GAS IN NEW YORK CITY INDUSTRIES..... (Courtesy of Consolidated Gas Company.)	1 Reel

This film shows how gas is used in various industries of New York City, such as a hat factory, a modern bakery, a doll factory and the manufacture of storage batteries.

WATER POWER (For description see page 37).....	1 Reel
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VIII. GEOGRAPHY

1. AFRICA

ALONG THE RIVER NILE.....	5 Reels
Street scenes in Cairo. Picturesque boats, or dahabiyehs, on the River Nile.	
Agriculture and irrigation along its banks. Tombs and temples of the ancient Pharaohs.	
THROUGH OIL LANDS OF EUROPE AND AFRICA—GERMANY, FRANCE, SPAIN, MOROCCO AND ALGERIA (For description see page 11).....	2 Reels
THROUGH OIL LANDS OF EUROPE AND AFRICA—POLAND, GREECE AND EGYPT (For description see page 12).....	4 Reels
TRAILING WILD ANIMALS IN AFRICA (For description see page 35).....	7 Reels

2. ASIA

ALL ABOARD FOR INDIA.....	2 Reels
A trip through the country, showing the home life in the Ganges Valley, farms, using white cows for plowing in the field, methods of irrigation, the orchards, burning timber to clear land, implements of a hillman, the class distinctions, the mud houses of the plainsmen, and thatched ones of the hillmen. Bombay, the seaport, Hindus, Mohammedans, beggars, life of the city. Benares, the holy city of the Hindus, Taj Mahal at Agra, Delhi, the capital of India, Viceroy of India and Mount Everest, the highest peak in the world.	
ANIMALS OF INDIA (For description see page 32).....	2 Reels
FRONTIERS OF A FORBIDDEN LAND (China).....	3 Reels
The Museum expedition to Yunnan Province, China. City life in Tali-fu and Li-Chiang. Strange methods of transportation. Village life and hunting scenes. Bear cubs at play.	
GANGES VALLEY.....	1 Reel
Life in India. The women's festival and the Taj Mahal at Agra. The sacred city of Benares. Pilgrims bathing in the River Ganges.	
HUNTING WHALES IN JAPAN (For description see page 34).....	1 Reel
INDIAN ELEPHANT (For description see page 34).....	1 Reel
JAPAN.....	3 Reels
Street scenes showing native costumes and modes of transportation. Beautiful temples, gardens, and courtyards. Japanese children at play. An open air school.	
KOREA, THE HERMIT KINGDOM.....	1 Reel
Seoul, the capital city. Street scenes and market places. A group of Korean school children. A wayside laundry.	
MERIN, THE NOMAD.....	4 Reels
An excellent film, giving in detail, the life of the Mongols, their yearly pilgrimage to attend the Buddah festival and their fanatical devotion to religion.	

3. AUSTRALIA

BEAUTIFUL RIVERS OF AUSTRALIA.....1 Reel

A scenic film dealing with the Tweed and Hawkesbury Rivers in Australia. Showing fields of sugar cane, sugar mills, farm land and oyster houses, which prove the rivers to be of great use as well as of great beauty.

GLIMPSES OF SYDNEY.....1 Reel

Glimpses of Sydney Harbor set in a glorious environment of picturesque features. The harbor from the air. The Circular Quay, pivot of Sydney's wonderful ferry and carry systems. Darling Harbor. Villas and dwellings along the shores. Kiribilly Cove. Middle Harbor. Parks along the shore. Fort Denison. The State Government House. The thickly populated beaches. Protection against sharks. Sunset on the harbor.

HUNTING KANGAROOS IN AUSTRALIA (For description see page 33).....1 Reel

JENOLAN CAVES OF AUSTRALIA (For description see page 23).....1 Reel

NEW NORFOLK AND DERWENT RIVER (Tasmania).....1 Reel

A trip up the Derwent River opens up a vista of beautiful country with apple orchards and vineyards. The city of Hobart. New Norfolk. Hop fields and kilns. The timber resources of Tasmania. A sawmill.

PEARL SHELL INDUSTRY.....1 Reel

An interesting film showing the industry developed from diving for pearl shell. The cleaning process and search for the pearls. How pearls are polished and graded.

SHEEP AND CATTLE RAISING IN AUSTRALIA.....1 Reel

This is an interesting and instructive film showing the flocks of sheep, the shearing process and wool industry, the round-up of the cattle and the branding.

TIMBER INDUSTRY IN AUSTRALIA.....1 Reel

Western Australia contains 16,000,000 acres of forest land rich in timber. The silence of the bush is broken by the axe. Felling giant monarchs of the forest. Sawing into lengths. The famous hardwoods Carri and Jarra. Picturesque method of hauling by horses and bullocks. Tractors are sometimes used. A bush landing. Timber trains winding a serpentine course of charm and beauty to the mill.

TRIP TO MOUNT BUFFALO.....1 Reel

A beautiful scenic film depicting the trip from Charlotta Arch to the top of Mount Buffalo, situated in the Blue Mountains on the eastern coast of Australia. Leaving Melbourne. Picturesque town of Bright. Big timber and yawning chasms. Eurobin Valley. Mountain streams. Owen's Valley. Mistake Lake. Gallery of the Gods. The summit. A sea of clouds. Mount Begong and Mount Feathertop.

4. EUROPE

ACROSS THE ST. GOTHARD ALPS.....2 Reels

The St. Gothard railway through the Alps in Switzerland. Picturesque towns hidden among these mountains. The birthplace of William Tell. Quaint Swiss children.

THE BASQUES (French Pyrenees).....1 Reel

The French side of the Pyrenees, inhabited by a race distinct from either the French or Spanish. The valleys and mountain sides dotted with tiny

- farms—the people and customs, their picturesque dress and dancing, also the famous beach at Biarritz and the town of Bayonne.
- LACE MAKERS OF CENTRAL FRANCE** 2 Reels
 This film shows Le Velay, a town famous for its lace. A view of the mountains. Le Puy, built on a mass of volcanic rock. The medieval streets. Old women sitting together making the famous lace. Also excellent views of the every day life of the people.
- NORMANDY AND BRITTANY** 2 Reels
 An interesting film showing the fishing villages of Brittany and the natural protection for the harbors; the fishing fleet coming in with sardines, religious ceremony and costumes of the various districts. Normandy is the home of the farmer. Here we see the peasants flaying grain, market day, and the dress and customs of the people.
- PARIS** 4 Reels
 An excellent film showing the approach to Paris by air, the Arc de Triomphe, Champs Elysees, Louvre Palace, Place de la Republic, the shops, sidewalk cafes, Tuileries Gardens, Luxemburg Gardens, sailing ponds, the Bourse, City Hall, the Opera House, Art Gallery, Cathedral of Notre Dame, Napoleon's Tomb, Eiffel Tower and many other places of interest.
- PERFUME AND WINE INDUSTRIES IN FRANCE** 1 Reel
 Grasse, the center of the perfume industry. This film shows the gathering of jasmine, tuberose and lavender and the process of making the perfume. Wine is one of the most important industries in France. Here is shown the careful cultivation of grape vines, grapes being carted to town, and finally the barrels of famous wine ready for export. Excellent pictures of the life of the people.
- PORTS OF FRANCE** 1 Reel
 This film shows Marseilles, the largest port in France, the new and old harbors, the docks, steamships and market life. Le Havre, the second largest port, Brest and Bordeaux, the shipping, and people of these seaport towns.
- SCENES IN RUSSIA** 1 Reel
 A scenic film taking us to Leningrad, Moscow, Tzaritzin and Kazan. Transportation along the great Volga River in summer and winter. Use of camels. Russia's agriculture. Typical market scenes. Beautiful churches and the religious ceremony of blessing the waters of the Volga. Boys learning a trade. Gold mining in Miass. Russian native dances.
- THROUGH OIL LANDS OF EUROPE AND AFRICA—GERMANY, FRANCE, SPAIN, MOROCCO AND ALGERIA** (For description see page 11) 2 Reels
- THROUGH OIL LANDS OF EUROPE—ITALY, HUNGARY, THE DANUBE, AND RUMANIA** (For description see page 11) 3 Reels
- THROUGH OIL LANDS OF EUROPE AND AFRICA—POLAND, GREECE AND EGYPT** (For description see page 12) 4 Reels

5. NORTH AMERICA

a. Alaska

ALASKAN ESKIMOS AT HOME.....	1 Reel
Leaving the last trading post. Kayaks made of sea lion skins. Calling on an Eskimo family. Their home life, wife making seal skin into boots. Eskimo dogs, sea gulls, geese, baby seal playing. Eskimos giving their native dances.	
ALASKAN MOOSE (For description see page 32).....	1 Reel
ALASKAN SHEEP ON HOME RANGE (For description see page 32).....	1 Reel
IVAN THE GREAT—KADIAK BROWN BEAR (For description see page 34).....	2 Reels
STORY OF COPPER (For description see page 28).....	10 Reels
TRUE NORTH (For description see page 35).....	8 Reels

b. Canada

APPLES OF ANNAPOLIS.....	1 Reel
(Courtesy of Canadian Government)	

The Annapolis Valley, Nova Scotia, the old Acadian land, is world renowned. This film shows it at apple blossom time. It gives the great care taken of the trees by the best modern methods, the harvesting of the crop in mid-autumn and the great exporting done there.

CITY OF LOYALISTS—ST. JOHN.....	1 Reel
(Courtesy of Canadian Government)	

A travelogue type of film dealing with St. John, one of Canada's most important cities and ocean ports. Founded in 1783 by the Tories after the American Revolution, St. John has many beauty spots and historic associations. Here is located the world-famous Reversing Falls.

DIGGING UP THE PAST (For description see page 4).....	1 Reel
FLOODS OF FORTUNE.....	1 Reel

A beautiful scenic film showing the great dams used for irrigation in Canada. Headwaters of vast floods are in the snows in Canadian Rockies, Falls and power Dam of Kanaskis, Calgary, chief city of irrigated land section. 250,000 acres are irrigated by waters stored here. Bossano Dam, largest in America, its main canal irrigates 450,000 acres. Diverting waters from main canal to irrigate the farm, using canvas dam. Garden truck, small fruits, alfalfa, hay, grain harvesting, threshing, and grain elevators.

HARVEST OF THE SUGAR MAPLE TREE.....	1 Reel
(Courtesy of Canadian Government)	

An interesting educational film depicting life in the sugar bush, demonstrating the old and new methods of tapping maple trees, of gathering sap, and transporting it to the kettles. It shows the boiling in modern evaporators, the bottling and canning of the maple syrup in the factory, and finally, an old-fashioned sugar bush party.

LUMBERING IN BRITISH COLUMBIA.....	1 Reel
(Courtesy of Canadian Government)	

British Columbia produces many million feet of lumber annually and one-third of the total output of Canada. Her immense forests contain probably the finest timber in the world today and in this film is depicted, in graphic

manner, the lumbering operations, from the felling of the giant trees, to the export shipping of the finished product.

LUMBERING IN EASTERN CANADA 1 Reel
(Courtesy of Canadian Government)

Canada possesses vast forest resources and lumbering is the third largest industry. This film depicts in an interesting manner every phase of this basic industry which has played such an important part in the development of Eastern Canada.

MONEY MAKING INDUSTRY (For description see page 28) 1 Reel

MOUNTAINEERING MEMORIES 1 Reel
(Courtesy of Canadian Government)

A scenic film showing a trip from Banff, 35 miles to the famous Mt. Assiniboine—the "American Matterhorn," and the efforts to climb the heights of this tremendous glacier. This film shows in detail the splendid glory of the Canadian Rockies and good close-ups of a squirrel and porcupine who come to investigate the camp cookery.

SALMON FISHING ON THE RESTIGOUCHE 1 Reel
(Courtesy of Canadian Government).

An interesting film depicting the different methods used in catching the silver salmon—and the beauties of the Restigouche River, Canada's most renowned salmon stream.

STORY OF A CAN OF SALMON 1 Reel
(Courtesy of Canadian Government)

An informative film showing in an interesting and non-technical manner how salmon is canned in the great canneries of British Columbia. Every step in the process from delivering the catch to the cannery to completed product is graphically shown.

THROUGH THE NORWAY OF AMERICA 1 Reel
(Courtesy of Canadian Government)

This film comprises a water cruise from Vancouver to Prince Albert. The views of the beautiful fjords and life along the banks make it a delightful scenic film.

WHERE BEAUTY DWELLS 1 Reel
(Courtesy of Canadian Government)

A scenic travelogue film of one of the most picturesque and interesting trips for visitors to Jasper National Park—the trip from Jasper Lodge to Maligne Lake. In addition to views of the famous Maligne Trail, Maligne Canyon and Medicine Lake, this film depicts the beauties of Maligne Lake—said to be one of the most wonderful in the Canadian Rockies.

c. Indians

HOPÍ INDIANS OF THE SOUTHWEST 4 Reels

This film gives an interesting picture of the every day life of a Hopi tribe and also the famous nine day ceremonies of the Snake Dance Festival. Here are shown their meals, hair dressing, process of basket making, getting wool ready and weaving blankets, and then the Snake Dance Festival in detail.

HUNTING GROUND OF HIAWATHA (For description see page 33) 1 Reel

INDIANS OF THE NORTHWEST.....	2 Reels
Industries of the Northwest Coast Indians. Clam digging, basket making, mat weaving, wood carving. Securing and preparing food.	
PUEBLO INDIANS OF THE SOUTHWEST.....	4 Reels
Ancient Pueblo dwellers. Hopi homes and people. Cooking paper bread, making pottery, and baskets. Spinning wool and weaving blankets. The Hopi Snake Dance.	

e. Polar Regions

ADVENTURES NEAR THE SOUTH POLE.....	6 Reels
This picture was made by Sir Douglas Mawson and his companions during the twenty-seven months they spent on the great polar continent south of Australia. After a voyage over stormy seas they arrived at a strange land of white where they lived for months amid blizzards, icebergs, and crevasses. Here they were amused by the comical and strangely human antics of the penguins, of the huge sea elephants, and by the seals so clumsy on land and so graceful in the water.	
LIFE IN THE FROZEN NORTH.....	3 Reels
A Museum expedition to the Arctic. Homes and customs of the Eskimo. Kayak races, stalking seal, fishing and hunting.	
NANOOK OF THE NORTH.....	6 Reels
The story of a brave Eskimo hunter, Nanook, and his family. Harpooning seal and walrus. Fishing in a seal skin kayak. Building the winter house of snow.	
NOO-KA-PING-WA (For description see page 34).....	2 Reels
TRUE NORTH (For description see page 35).....	8 Reels

f. United States

BETTER MILK (For description see page 24).....	1 Reel
BIRD AND ANIMAL LIFE OF YELLOWSTONE (For description see page 32)....	1 Reel
FOREST AXIOM.....	1 Reel
In Franklin's time 822,000,000 acres of our country were forests—today we have very little. Diagrams showing waste, usage and annual drain comparisons. Our present forest resources. Waste in woods, mills, improper curing, manufacturing, and others.	
FOREST GUARDIAN (For description see page 33).....	1 Reel
FROM FOREST TO NEWSBOY.....	1 Reel
A film depicting the making of newspaper, from the cutting of the trees, the grinding of the pulpwood and other processes which it goes through to the finished, weighed paper roll ready to go to the news office for copy.	
MINNESOTA BIRD LIFE (For description see page 6).....	1 Reel
NATURAL WONDERS AND GAME OF YELLOWSTONE.....	2 Reels
Yellowstone Park, Falls and Canyon, hot springs called mud pots, clear bubbling hot springs, fresh water lakes with white swans, elk, sheep, antelope and bison roaming the open ranges.	
NIAGARA FALLS.....	1 Reel
A beautifully photographed scenic film, worthy of the world's most famous spectacle, Niagara Falls—including splendid close-up views of the Horseshoe and American Falls, the Whirlpool Rapids and the Gorge.	

OLD NEW YORK (For description see page 26).....	1 Reel
OUR CITY—NEW YORK (For description see page 10).....	3 Reels
PANAMA CANAL.....	1 Reel
Working at Culebra Cut. Releasing water into Gatun Locks. Passage of first boat through the locks. Great size of locks as shown by pigmy figure of man walking. Dredger cleaning landslide. Final blasting to unite waters of Atlantic and Pacific at Gamboa Dike.	
SCENES IN OLD NEW YORK (For description see page 27).....	1 Reel
STAFF OF LIFE (Wheat).....	1 Reel
This film depicts the metamorphosis of a stalk of wheat. Beginning with the wheat field, the ploughing, the harrowing and the harvesting. The different types of machines used are also shown. The threshed grain taken to the mill, then the process of making flour for shipment to retailers, are all given in a graphic manner.	
STORM AND SURF AT BAR HARBOR.....	1 Reel
The "Southeaster" from the Ocean Drive, Bar Harbor. The reef in a rage. The surf on Otter Cliffs.	
STORY OF COAL (For description see page 28).....	3 Reels
STORY OF COPPER (For description see page 28).....	5 Reels
STORY OF LEAD MINING AND MILLING (For description see page 30)....	3 Reels
SUWANEE RIVER.....	1 Reel
As one floats lazily along this beautiful stream past banks covered with moss-draped trees and vines, it seems like a page from fairyland. Here and there a field of sugar cane or a field of snowy cotton, past a hut where glimpses of the home life of the negro are seen, through Billy's Lake, the headwaters of the Suwanee River.	
TOWERING WONDERS OF UTAH.....	1 Reel
A scenic travelogue through the Mojave Desert, with a pause at the famous Death Valley and the Valley of Fire in Nevada, then on through the beautiful canyons, with their queer shapes resembling towers, cathedrals, mosques and minarets.	
USES OF GAS IN NEW YORK CITY INDUSTRIES (For description see page 14)	1 Reel
WHITE-TAILED DEER IN HIS NATIVE HAUNTS (For description see page 35) .	1 Reel
WONDERFUL WORK OF WATER.....	1 Reel
Vapor, water and ice. The formation of fog and clouds. Rain and snow. Glaciers. Hot springs and geysers. The Grand Canyon. Niagara and Yosemite Falls.	
SISAL AND SPONGE INDUSTRIES OF THE BAHAMAS.....	2 Reels
An interesting and instructive film showing in a clear non-technical manner the entire processes of the Sponge industry, for which there is such a great export demand, and of the Sisal industry, from which our hemp rope is made.	

6. SOUTH AMERICA

BIRD ISLANDS OF PERU (For description see page 32).....	4 Reels
COFFEE INDUSTRY IN BRAZIL.....	1 Reel
This film shows Santos, the port for coffee. A coffee plantation, the picking of the ripe coffee berries from the trees, bags of berries being sifted and win-	

nowed, then measured and carted to the platforms for drying. The cover to protect it from the rains. Being graded in the mill and sacked for shipment.
 ECUADOR.....1 Reel

A scenic film showing the trip up the River Guayas to the city of Guayaquil, metropolis of Ecuador, and the life of the people. Then over to several small islands to the homes of many birds. Here we find the brown pelicans, the man-o'-war bird, and the blue-footed boobies enjoying a haven undisturbed by men.

ELEPHANT SEALS OF GUADALUPE ISLAND (For description see page 33)....1 Reel
 FROM THE LAND OF THE INCAS.....1 Reel

Mummies of human beings and favorite pets. A tale of a lost civilization told by mummies. They were excellent weavers. Original designs. Ponchos made of bird feathers. Ranked high as metal workers. Beautiful pottery. Perpetuated record of customs in clay, jars of different forms and designs.

JUNGLE JOY RIDE.....1 Reel
 Among the Patamona Indians of British Guiana. Weaving baskets and hammocks. Sugar cane and tapioca. Parrots, bat, boa constrictor. Running dangerous rapids in a native canoe.

NORTHERN PERU.....1 Reel
 This film shows the city of Quito, 9,272 feet above sea level. The people and their customs, and the trip down the mountainside to the sea coast in a hand car.

7. SOUTH PACIFIC ISLANDS

DRAGON LIZARDS OF KOMODO (For description see page 4).....5 Reels
 KILAUEA'S LAKES OF FIRE (For description see page 23).....1 Reel
 SAVAGE TRIBES OF BORNEO.....4 Reels

A South Sea Venice with water highways, gondolas, and houses on stilts. Arts and industries of the natives. A wedding ceremony in Borneo. Monkey land.

IX. GEOLOGY AND PHYSIOGRAPHY

ACROSS THE ST. GOTHARD ALPS (For description see page 16)	2 Reels
CRYSTAL FORMATION (For description see page 7)	½ Reel
GEM CUTTING AND POLISHING.	½ Reel

How gems in the rough are converted into the beautifully carved and polished stones which we use for jewelry. "Slitting" away the rock. Faceting and polishing.

JENOLAN CAVES OF AUSTRALIA.	1 Reel
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An interesting and instructive film showing the Jenolan Caves of Australia. In the different caves one can see many curious formations, such as, the stalactites and stalagmites forming the Hall of Columns, a stalactite formation of a weeping willow and a stalagmite like the back of a newly shorn sheep with the sheer-marks in the wool. This film in showing the work of water in limestone deposits is useful in depicting the work of underground water in forming caves.

KILAUEA'S LAKES OF FIRE.	1 Reel
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Sulphur deposits from the volcano. Alex, the guide, explaining the panorama. The eternal fires. Close view of the lava deposits. Boiling lava shown in its natural colors and sulphurous steam rising.

MAGIC GEMS.	1 Reel
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Silver in the native state and virgin gold. Turquoise as carved by Egyptians 6000 B.C., Suez Canal mines in 4000 B.C. An emerald, ruby, sapphire, tourmaline, topaz, diamond from South Africa, garnet and opal.

NIAGARA FALLS (For description see page 20)	1 Reel
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POWER OF CLOUDS.	1 Reel
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A film showing clouds carrying rain. Rainfall and its effect on the streams and rivers, and how man has converted this mighty power to his own uses.

STORM AND SURF AT BAR HARBOR (For description see page 21)	1 Reel
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STORY OF COAL (For description see page 28)	3 Reels
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STORY OF COPPER (For description see page 28)	5 Reels
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STORY OF PETROLEUM (For description see page 30)	4 Reels
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TOWERING WONDERS OF UTAH (For description see page 21)	1 Reel
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WHERE BEAUTY DWELLS (For description see page 19)	1 Reel
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WHY OF A VOLCANO.	1 Reel
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How the earth shrinks as it cools. Lava works its way through the wrinkles caused by shrinking. If pressure is great, an explosion occurs. Diagrams showing amount of lava ejected.

WONDERFUL WORK OF WATER (For description see page 21)	1 Reel
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X. HYGIENE

- BENDING THE TWIG. 1 Reel
 "Train up the child in the way he should go, and when he is old he will not depart from it," (Proverb). This film illustrates how life's twigs may be bent in the right direction through the proper care of the body and proper food.
- BETTER MILK. 1 Reel
 This film gives the use of milk in olden days. The bringing of cows to America by the Pilgrims. The careful breeding of today, the milking, the containers and careful testing and purifying before distribution to the public.
- DENTAL HYGIENE. 2 Reels
 An interesting lesson for children in keeping their teeth well brushed, compared with the way Nature takes care of the animals' teeth, as shown at the New York Zoological Gardens. Produced from a child's view point with broad educational and entertainment value.
- FIRST AID IN THE HOME. 1 Reel
 A picture showing the necessity for everyone to know the principles of first aid. The injuries so easy for boys to receive in their play and how to care for them until arrival of the doctor.
- PRICELESS GIFT OF HEALTH. 1 Reel
 Two mothers and the care they give their baby boys. How careful attention insured the happiness and success of one boy in later life, while a mother's neglect caused the other boy to grow up listless and without ambition.
- THROUGH LIFE'S WINDOWS (For description see page 6). 1 Reel

XI. HISTORY

ALEXANDER HAMILTON.....3 Reels

A remarkable film dealing with the crucial period immediately following the War of Independence and revealing the fearless manner in which Hamilton took hold of the financial affairs of the confederation and established its credit. The picture shows also the inauguration of George Washington as first President of the United States, and recounts the story of the rebellion against the levy of an excise tax; a situation which afforded the new nation the opportunity to show its strength.

BENJAMIN FRANKLIN (For description see page 3).....1 Reel

COLUMBUS.....4 Reels

The "mad Italian" is first seen at the court of King John II of Portugal in 1485. On discovering the duplicity of this monarch he leaves Portugal and goes to Spain. After years of endeavor he finally obtains Isabella's support. The departure of his tiny fleet, his dangers and doubts while on the high seas and his eventual triumph in landing upon Watling Island, October 12, 1492, are all depicted with beauty and interest.

DANIEL BOONE.....3 Reels

The courage and unconquerable spirit of the early pioneers, as typified by the adventurous career of Daniel Boone. Because of his amazing knowledge of Indian life, he was sent by landholders of North Carolina to blaze the way for a new settlement. In the wilderness of what is now Kentucky he established Boonesboro, and brought it successfully through many dangers.

DECLARATION OF INDEPENDENCE.....3 Reels

This stirring account of the efforts of a small group of patriots to bring about a unanimous vote in favor of independence reveals in striking fashion the three outstanding attitudes of public opinion, as represented by the Tories, the Conservatives, and those in favor of absolute independence. The unofficial gathering of delegates, the proceedings of the Second Continental Congress, the famous session of July 2, 1776, when a unanimous vote was secured in favor of the resolution for independence, the formal adoption of the Declaration on July 4, and the subsequent excitement in Philadelphia, are all pictured in an unforgettable and dramatic manner.

DIXIE.....3 Reels

This Civil War picture of the civilian South emphasizes the heroic part played by the women of the Confederacy and depicts the position and attitude of the slaves during the years of the war.

EVE OF THE REVOLUTION.....3 Reels

A picture that makes live again events of vital importance in the story of "the making of America." This film reveals the state of mind of the people preceding the actual outbreak of hostilities, by recreating the incidents of the Stamp Act, "Taxation Without Representation," Boston Massacre, the Boston Tea Party, the famous rides of Paul Revere and William Dawes, Jr., the sharp military clashes at Lexington and Concord, and the retreat of the British.

- FROM THE LAND OF THE INCAS (For description see page 22).....1 Reel
- FRONTIER WOMAN.....3 Reels
- Designed to reveal the courage and fortitude of America's pioneer women, and the part played by them in the making of our nation, this film relates the story of the settlement of Watauga, in the mountains of Tennessee, in 1780. Practically all of Watauga's fighting men had ridden with John Sevier against Major Patrick Ferguson, Tory terrorizer of the frontier. With every trader bringing fearful tales of Indian uprisings the courageous women "carried on" alone and refused to recall their warriors, who, thus freed, fought and won the battle of King's Mountain, a victory that was a prelude to the defeat of Cornwallis.
- GATEWAY TO THE WEST.....3 Reels
- A dramatization of that heroic portion of our national epic when France, working south from Canada, and England pressing westward from her colonies along the Atlantic coast, began the inevitable conflict over the vast wilderness west of the Alleghanies. Here Washington is shown as a young colonel, who, sent by Governor Dinwiddie of Virginia to lodge a protest with the French, assumes command of the expedition upon the death of his ranking officer, and makes his courageous stand for Fort Necessity; an engagement which opened the eyes of England's ministers to the seriousness of the French menace to America.
- GEORGE WASHINGTON (For description see page 3).....1 Reel
- JAMESTOWN.....4 Reels
- A realistic drama of the first permanent English settlement in America, in which the Virginia colony represents the focus of the struggle between England and Spain for the control of North America. The capture of Pocahontas, daughter of the Indian Chief Powhatan, is followed by her marriage to John Rolfe, and the breaking of the Spanish influence over Powhatan. His war of extermination against the English ends with his daughter's wedding and the Jamestown colony is firmly established.
- OLD NEW YORK.....1 Reel
- An interesting as well as educational comparison of the old New York and the new. Glimpses of prominent landmarks of today and what they were a century ago.
- PANAMA CANAL (For description see page 21).....1 Reel
- PETER STUYVESANT.....3 Reels
- An interesting presentation of the events from 1653 to 1664 through which Dutch New Amsterdam became English New York. Life in the colony under the stern rule of Stuyvesant, the frivolity of the court of Charles II, King of England, the decision to send a fleet to New Amsterdam, the revolt of Stuyvesant's citizens against his autocratic attitude and the bloodless conquest of the Dutch colony are dramatically pictured in this play.
- PILGRIMS.....3 Reels
- A picture which deals with the struggle for religious freedom as typified by the Pilgrims. Beginning with the Separatist Movement in Scrooby, England, it traces their escape to Holland and finally their departure for America. The voyage of the Mayflower, the landing on Plymouth Rock, the hardships and suffering of the settlers during their refusal to return to England, are shown in

a manner which reveals the simple faith of the Pilgrims and their devotion to the ideal of freedom of religious thought and expression.

PURITANS.....3 Reels

This film, contrasting the economic background of the formation of the Massachusetts Bay Colony and life in early New England with the court of King Charles I, serves also to emphasize the capable leadership of Governor Winthrop and his successful struggle to retain the colony's charter in the face of religious dissension from within and political attacks from across the sea.

SCENES IN OLD NEW YORK.....1 Reel

An historical film showing Bowling Green, the center of activities; the first fire engine, the day of the first steam boat up the Hudson, coaches and dress of the period and some famous New Yorkers,—John Jacob Astor, Robert Fulton and Washington Irving.

VINCENNES.....3 Reels

A forceful and inspiring story of the exploits of George Rogers Clark, who in 1779 made his bold winter dash upon Vincennes, headquarters of Hamilton, British Governor General of the Northwest. By his capture of this post Clark broke the influence of the British over the Indians who had opposed the westward spreading American colonists, and won for the Republic the vast territory from which later were formed the five great states of Ohio, Indiana, Illinois, Michigan, and Wisconsin.

WOLFE AND MONTCALM.....3 Reels

This film depicts in detail the statesmanship of William Pitt, the strategy of General James Wolfe, the obstacles faced by the gallant Frenchman Montcalm through the jealousy of Vaudreuil, Governor General, and the spectacular battle waged on the Plains of Abraham with the City of Quebec, and the destiny of a continent at stake.

YORKTOWN.....3 Reels

The progress of the War of Independence between January and October 1781, the hardships and suffering of the American troops, the problems confronting General Washington, the international aspect of the campaign of 1781, the aid rendered by the French leaders, the march of the American army south to Yorktown, the arrival of the French fleet, the complete outwitting of Clinton and Cornwallis, the battle of Yorktown, and the surrender of Cornwallis are all adequately and graphically depicted in this film.

XII. INDUSTRIES AND ENGINEERING

COFFEE INDUSTRY IN BRAZIL (For description see page 21).....	1 Reel
FROM FOREST TO NEWSBOY (For description see page 20).....	1 Reel
GEM CUTTING AND POLISHING (For description see page 23).....	½ Reel
GIANT IN FAIRYLAND (For description see page 33).....	1 Reel
HARVEST OF THE SUGAR MAPLE TREE (For description see page 18)....	1 Reel
LUMBERING IN BRITISH COLUMBIA (For description see page 18).....	1 Reel
LUMBERING IN EASTERN CANADA (For description see page 19).....	1 Reel
MONEY MAKING INDUSTRY.....	1 Reel
(Courtesy of Canadian Government)	

An educational film showing how Canada mints its coinage. Beginning with the bars of gold and silver stored in huge vaults through all the melting, cutting, cooling and stamping processes and the many accuracy tests.

PEARL SHELL INDUSTRY (For description see page 16).....	1 Reel
PERFUME AND WINE INDUSTRIES OF FRANCE (For description see page 17) ..	1 Reel
PLAY SAFE (For description see page 10).....	1 Reel
SCIENCE IN THE HOME (Matches).....	1 Reel

A study of the Lucifer match. The beginning of matches and a detailed illustration of the making of matches. The careful process they must go through is shown in a clear and interesting manner.

STORY OF ABRASIVES (For description see page 7).....	4 Reels
STORY OF ALLOY STEEL (For description see page 7).....	4 Reels
STORY OF ASBESTOS (For description see page 7).....	3 Reels
STORY OF A CAN OF SALMON (For description see page 19).....	1 Reel
STORY OF COAL.....	3 Reels
(Courtesy of U. S. Bureau of Mines.)	

Reel 1 shows use of the diamond core drill, the sinking of a shaft, a trip through the mine, and the undercutting of the coal. Reel 2 shows drilling, blasting, and loading (the cars being drawn to the shaft), hoisting, dumping, weighing, sorting, and final dumping of coal into railroad cars; also boiler room and hoisting engines. Reel 3 shows ventilating fan, mine locomotives, and mine shops; also one of the world's largest coal washeries, a drift mine, and loading coal onto a river barge.

STORY OF COPPER MINING.....	10 Reels
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This film gives in detail the prospecting for copper, finding the ore, beginning of development, and the mining processes. We see many different camps, the miner's life, the use of the different machinery, copper at the mill for one process, at smelters for another, and in the refinery, at last being turned out in various commercial shapes and inspected.

STORY OF DYNAMITE.....	2 Reels
(Courtesy of U. S. Bureau of Mines)	

Reel 1 shows views of the days when water wheels and prairie schooners were in use; also views of present-day scenes, power furnished by great dams, steamships crossing the ocean, fast trains and flourishing cities—the changes

being due to the ease of mining vast amounts of raw material by the use of dynamite. The reel also shows the bringing of nitrate of soda from Chile and details of the manufacture of dynamite, including the use of wood pulp and nitrate of ammonia, the conversion of nitrate of soda into nitric acid in huge vats, the manufacture of nitroglycerin and its transportation in rubber-lined rubber-tired carts, the mixing of the various ingredients, the addition of the nitroglycerin the thorough mixing of the whole under rubber-shod wheels, and the cutting, forming, spraying with paraffin, and filling of the cartridges. Uses of gelatin dynamite are also shown as are the mixing of nitrocotton with nitroglycerin, addition of the other ingredients, the mixing of the whole and the feeding on endless belts to the cartridge machine. Reel 2 shows a panorama of a large dynamite plant with testing and research laboratories, tests to show the strength of the explosives, the transportation of dynamite and its use in a Pennsylvania coal mine, in open-pit iron mines in Minnesota, in a stone quarry, in clearing a railroad right of way, the Moffat tunnel under the Continental Divide in Colorado, in agriculture (blasting out stumps and digging ditches) removing old buildings, breaking ice jams, and in deepening the Hell Gate Channel, New York.

STORY OF AN ELECTRIC METER (For description see page 36) 3 Reels

STORY OF FIRE CLAY REFRACTORIES 4 Reels
(Courtesy of U. S. Bureau of Mines)

Reel 1 shows the Laclede-Christy plant at St. Louis, the storage yards and kilns, and the mines where clay is obtained. Shows dynamiting of overburden and loading of freight cars; also shows underground workings where overburden is extremely heavy. Sorting of clay by hand, testing in furnace for fusion point, grinding by huge wheels and sorting of ground clay by screening. Reel 2 shows clay press where bricks are formed at a pressure of 3,000 pounds per square inch, the drying ovens where the bricks stay 48 hours, and the kilns where they are baked for 6 days and 2,250 degrees to 2,400 degrees. Shows making of bricks by still-mud process, mixing of clay and water, cutting clay into size as it is forced out in oblong shape, repressing, drying. Also shows molding of fire clay into various forms by hand. Reel 3 shows mixing, forming, cutting and pressing of clay for "sleeves" and ladle nozzles; the process of washing clay and the use of fire clay in the glass industry. Shows the immense tanks wherein glass is melted, the annealing ovens, making bottles, baking, drying kilns in the lumber, enameling, baking and automotive industries, heat treating, and forge furnaces. Reel 4 shows building a large boiler setting, relining of a malleable-iron furnace, a 350 foot tunnel kiln, and electric furnace, by-product coke ovens, zinc-distilling vessels, rotary kilns in cement industry, rolling a sheet of plate glass and school children modeling clay figures.

STORY OF GASOLINE (For description see page 8) 3 Reels

STORY OF HEAT TREATMENT OF STEEL 2 Reels
(Courtesy of U. S. Bureau of Mines)

Reel 1 shows laboratory experiments with steel treated by various heat-treating methods and the effects of different treatments. Shows the heat treatment of the front axles of a motor car in a huge automatic furnace and how the furnace is kept at correct temperature, 1,555 degrees by pyrometers

and signal lights. Shows axles taken from the furnace, quenched in oil, which must also be kept at the proper temperature (about 90 degrees) and tempered. Reel 2 shows completion of tempering and tests for proper hardness and strength. Shows heat treatment of steering knuckles and other parts of a motor car, and the effect of case and skin hardening of parts subject to severe wear.

STORY OF LEAD MINING AND MILLING 3 Reels
(Courtesy of U. S. Bureau of Mines)

Reel 1 shows the relative production of lead by countries and states, prospecting with diamond drill, driving of tunnels to new ore bodies, miners being lowered into the mines, drilling and blasting at headings, mechanical drifting shovel at work, and mining and loading. Reel 2 shows mine cars hauled by electric locomotive to shaft, emptying of cars by rotary dumps, hoisting of ore to the mill, crushing of ore, and its concentration on tables. Reel 3 shows concentrating tables, dewatering and stacking of tailings, regrinding of middlings, filtering and drying, coal for the mills brought by ferry across the Mississippi River, and community scenes.

STORY OF LEAD SMELTING (For description see page 8) 2 Reels

STORY OF PETROLEUM 4 Reels
(Courtesy of U. S. Bureau of Mines)

Reel 1 shows geologist locating a new well, the building of a derrick, "rigging up" the drilling equipment, rotary drilling, "shooting" a well with nitroglycerin, piping of oil to storage tanks, method of pumping wells, and panoramic views of several large oil fields, one largely covered with water. Reel 2 shows use of trucks and tractors in oil camps, casing-head gasoline plants (casing-head gasoline is obtained from the gas that comes from a producing oil well) a map of the large pipe-line system of the United States, pumping stations, method of cleaning pipe lines by a device forced through the pipe by the oil, the rapid laying of new pipe lines when a well "comes in" and the end of a pipe line in East Chicago. Reel 3 shows the refining of oil products in huge stills. The different products of crude oil pass off as vapor, are condensed and run to the receiving house, where tests are continually made to determine the quality and gravity of the products. The coke, or carbon, that remains in the still is valuable and is removed by manual labor. Reel 4 shows how foreign substances are removed from the oil and how wax is extracted from it; also the filling of tank cars, cans, and barrels, and the distribution of gasoline by service stations. An animated drawing shows all of the products obtained from a barrel of crude oil.

STORY OF POWER (For description see page 37) 3 Reels

STORY OF SPARK PLUG (For description see page 36) 2 Reels

STORY OF STORAGE BATTERY (For description see page 36) 2 Reels

STORY OF V-TYPE CYLINDER MOTOR (For description see page 36) 3 Reels

TIMBER INDUSTRY IN AUSTRALIA (For description see page 16) 1 Reel

USES OF GAS IN NEW YORK CITY INDUSTRIES (For description see page 14) . 1 Reel

WATER POWER (For description see page 37) 1 Reel

XIII. LITERATURE

BENJAMIN FRANKLIN (For description see page 3)	1 Reel
HIAWATHA	4 Reels
Gitche Manito and the Peace Pipe. Hiawatha's childhood and friends; his fasting, wooing, and wedding feast. The famine. Hiawatha's departure for the Land of the Setting Sun.	
HUNTING GROUND OF HIAWATHA (For description see page 33)	1 Reel

XIV. NATURE STUDY

- ADVENTURES NEAR THE SOUTH POLE (For description see page 20) 6 Reels
- ALASKAN MOOSE 1 Reel
 Answering the call of the photographer came three moose from three directions, one female and two males, and unconsciously gave us this very human story of moose mating. Excellent close-up views.
- ALASKAN SHEEP ON HOME RANGE 1 Reel
 Herds of sheep graze on the scarce vegetation of the mountain sides. Their remarkable agility in climbing the steep cliffs.
- AN ADVENTURE IN TRIPOLI (For description see page 4) 1 Reel
- ANIMALS OF INDIA 2 Reels
 These reels show many of the animals of India and how some are used by the people in their work. Mules and donkeys are common, the zebu is used for plowing and hauling bull-carts, domesticated elephants are valuable in lumber yards and lead the showy processions of native princes. Other animals are the tiger, leopard, a colony of egrets, crocodiles, sambur deer, antelope, wild pigs, jungle fowl, monkeys and the rhinoceros.
- ANIMALS THAT LIVED WHEN THE WORLD WAS YOUNG (For description see page 4) 1 Reel
- APES AND HORSES AT THE ZOO 1 Reel
 Dinah, the gorilla, with her friend, the white terrier. Chimpanzee and orang-utan. The nimble gibbon. Wild horses of Europe and Asia.
- BARE FACTS ABOUT BEARS 1 Reel
 A study of the different types of bears. Their dispositions and chief characteristics are shown with a boxing match between some cubs.
- BEASTS OF PREY 1 Reel
 An interesting film giving the characteristics of various wild animals and the locality where they roam.
- BIRD AND ANIMAL LIFE OF YELLOWSTONE 1 Reel
 This film shows the wild life of Yellowstone Park. The gulls, osprey, white pelicans, beaver, black bear and other species, deer, mountain sheep, elk, antelope and a herd of American bison.
- BIRD ISLANDS OF PERU 4 Reels
 Hosts of sea-birds and animals found on the barren islands off the coast of Peru. The guano industry. Indian fishermen. Herds of sea lions.
- BOBBY'S ARK 1 Reel
 A film to stimulate the children's knowledge. A little boy falls asleep and in his dream are all the animals taken on the Ark. Can the audience name them all?
- CHICK HATCHING FROM SHELL (For description see page 4) 1 Reel
- CUCKOO'S SECRET (For description see page 4) 1 Reel
- DENTAL HYGIENE (For description see page 24) 2 Reels
- DEPTHS OF THE SEA (For description see page 4) 4 Reels
- DIGGING UP THE PAST (For description see page 4) 1 Reel

- DRAGON LIZARDS OF KOMODO (For description see page 4).....5 Reels
- DUCK-BILLED PLATYPUS OF AUSTRALIA.....1 Reel
- Views of the Platypus, the queer egg-laying mammal found only in Australia. Close-up views showing method of locomotion, structure and adaptations of the fore and hind feet, the large flattened tail, the sensitive duck-like bill provided with horny plates in place of teeth, and the mouth pouches used for partial digestion of food.
- DWELLERS OF THE DEEP.....1 Reel
- Aquarium at old Castle Garden. Inspecting fishing traps. Hawk-bill turtle. Sea-lions. Feeding time. Bony Gar. Catfish. Sub-sea light. Coffers-fish. Cowfish. Silvermoonfish. Seabeam fish. Shark. Sucking fish. Bird-fish. Jewfish. Clear-nose skate. Spade and Globe fish.
- ELEPHANT SEALS OF GUADALUPE ISLAND.....1 Reel
- A herd of about four hundred on the beach and in the water. An excellent close-up study of the seals and their habits.
- FEATHERS.....1 Reel
- A beautiful film which gives in colors some of the many species of birds, such as the pelicans, stork, parrots, humming bird, flicker or woodpecker, wood duck, kingfisher, redfaced love bird, blue cotinger, golden pheasant and bird of Paradise with the localities in which they live.
- FOREST AXIOM (For description see page 20).....1 Reel
- FOREST GUARDIAN.....1 Reel
- How the forests of New York State are protected by special fire guards. The right and wrong kinds of sportsmen. How a match, carelessly dropped among leaves, may cause great forest fires.
- FROGLAND..... $\frac{1}{3}$ Reel
- Reproducing frogs in wax. A live frog is given ether and then covered with a heavy coating of plaster. The frog may be taken out alive and the plaster filled with wax.
- GIANT IN FAIRYLAND..... $\frac{1}{2}$ Reel
- Mr. Herman Muller of the American Museum making reproductions in glass of flowers and minute sea animals. Glass-blowing.
- GRAY SQUIRREL.....1 Reel
- This film shows the adventures of a little gray squirrel born in the American Museum of Natural History, his adventures with children, the food he ate and the way he buried nuts in the woods.
- HARVEST OF SUGAR MAPLE TREE (For description see page 18).....1 Reel
- HOW LIFE BEGINS (For description see page 5).....4 Reels
- HOW QUEEN BEES DUEL TO DEATH (For description see page 5)..... $\frac{1}{4}$ Reel
- HUNTING GROUND OF HIAWATHA.....1 Reel
- A "picture-poem" illustrating part of Longfellow's famous "Hiawatha." This film shows his life in the forest, with the small animals whom he called brothers, hunting for game, and also his dress and weapons.
- HUNTING KANGAROOS IN AUSTRALIA..... $\frac{1}{2}$ Reel
- Australia is the home of the kangaroo. Here we have a group frolicking, showing their amazingly speedy hops when the hunters arrive and finally, the capture.

- HUNTING WHALES IN JAPAN. 1 Reel
 Pearl divers at Mikimoto. Aikawa, the principal whaling station. Harpoon-
 ing a whale and hauling the prize on shore. Whale oil and blubber.
- INDIAN ELEPHANT. 1 Reel
 A herd of wild elephants in the jungle, feeding, off for the hunt, a native
 tracker. Training and care of the domesticated animal, a native procession.
 The elephant's value in lumber yards. A leopard and tiger hunt on elephant
 back.
- INSECT LIFE ALONG NATURE TRAILS. 4 Reels
 Accompanying a boy scout along the Nature Trail laid out in Tuxedo Park,
 we see water striders in a brook, crickets, cicadas and grasshoppers making
 up insect orchestra, gypsy moth and Japanese beetle, earwigs, praying mantids,
 European cabbage butterfly, tent caterpillar, monarch butterfly, wasp, dragon
 flies, honey bees, and also the assistance given to flowers by the insects.
- IVAN THE GREAT—THE ALASKAN BROWN BEAR. 2 Reels
 Kadiak Grizzly, the largest bear in the world. Cooking our breakfast.
 A ptarmigan and nest with eggs. Distant views of Ivan. "Porky", Ivan's
 nephew, comes for lunch. Close-up of a caribou. Ivan having supper in salmon
 stream. Ivan's family—mother and three cubs,—going to salmon stream
 for supper, feasting and playing with sea gulls, catching salmon. Good close-
 ups.
- JENOLAN CAVES OF AUSTRALIA (For description see page 25). 1 Reel
- KILAUEA'S LAKES OF FIRE (For description see page 23). 1 Reel
- KNIVES AND FORKS OF THE ANIMAL KINGDOM (For description see page 5). ¼ Reel
- LIFE HISTORY OF A DUCK HAWK. 1 Reel
 An interesting and instructive film depicting the homes and young of the
 Duck Hawk far up on the almost inaccessible cliffs away from the haunts of
 man. The Duck Hawk is the bird used by the knights of old in their falconry.
- LIFE HISTORY OF THE PEARL (For description see page 5). 1 Reel
- LIFE HISTORY OF THE SILKWORM (For description see page 5). 1 Reel
- MAGIC GEMS (For description see page 23). 1 Reel
- MINNESOTA BIRD LIFE (For description see page 6). 1 Reel
- MODERN MIRACLE WORKER. 1 Reel
 "Behind the scenes" of a museum group. Showing the reproduction in wax
 of some of the common plant forms. These are used as background in some
 of the habitat groups.
- MOUNTAINEERING MEMORIES (For description see page 19). 1 Reel
- NANOOK OF THE NORTH (For description see page 20). 6 Reels
- NATURAL WONDERS AND GAME OF YELLOWSTONE (For description see page 20)
 2 Reels
- NIAGARA FALLS (For description see page 20). 1 Reel
- NOO-KA-PING-WA. 2 Reels
 Life as a puppy. He is used as a sledge dog. Hunting little Auks. Eskimos
 stalking seal. Glaciers and icebergs.
- PIRATES OF THE AIR. 1 Reel
 This film shows the characteristics of the three main hunters of the air—
 the Owls, Eagles, and Vultures. It also explains which of those who prey
 upon others are harmful to man and which are helpful.

POWER OF CLOUDS (For description see page 23)	1 Reel
PRICELESS GIFT OF HEALTH (For description see page 24)	1 Reel
PROTOZOA AND HYDROIDS (For description see page 6)	1 Reel
RACE OF THE AGES	½ Reel
The horse race between "Man O' War" and St. Barton, October 12, 1920, at Windsor, Ontario. Sections of slow motion photography.	
RARE ANIMALS AND TALE OF THE HARE AND THE TORTOISE,	1 Reel
Showing some rare animals, their characteristics and homes, and an illustration of the old fable of the Hare and the Tortoise carrying its moral of delay as a fatal thing, as "Tomorrow" never comes.	
SALMON ANGLING ON THE RESTIGOUCHE (For description see page 19)	1 Reel
SAVAGE TRIBES OF BORNEO (For description see page 22)	4 Reels
SEEDS AND SEED DISPERSAL (For description see page 6)	1 Reel
SNOWY EGRET (For description see page 6)	1 Reel
STORM AND SURF AT BAR HARBOR (For description see page 21)	1 Reel
TOAD TRAITS (For description see page 6)	1 Reel
TRAILING WILD ANIMALS IN AFRICA (Museum Use Only)	7 Reels
Martin Johnson's African hunt. Zebras and antelope at a water-hole. Giraffe families. A charging rhinoceros and a lion hunt. Elephant herds.	
TREE SLOTH'S GREAT-GREAT-GRANDMOTHER (For description see page 6) . ½ Reel	
TRUE NORTH (Museum Use Only)	8 Reels
These pictures are the result of three years' exploration in Alaska, from the Mackenzie and the Yukon to the Bering Sea, from the Arctic to the end of the Aleutian Islands. Hunting and fishing with bow and arrow, in forests stocked with game, and rivers filled with fish. The formation of icebergs. The mid-night sun.	
WHERE DID YOU GET YOUR FACE? (For description see page 6)	½ Reel
WHITE-TAILED DEER IN HIS NATIVE HAUNTS.	1 Reel
These deer are still plentiful in the Adirondack Mountains. A doe enjoying her meal of leaves and buds. A buck follows his mate across the stream.	
WHY OF A VOLCANO (For description see page 23)	1 Reel
WILD BABIES	1 Reel
An interesting film depicting the paternal instincts of birds and animals, such as the vireo, the redstart, the blue bird, the prairie dog, the deer, the Rocky Mountain goat, the llama—their homes, the hunt for food and the mother and babies romping.	
WONDERFUL WORK OF WATER (For description see page 21)	1 Reel

XV. PHYSICS

STORY OF ELECTRIC METER.....3 Reels (Courtesy of U. S. Bureau of Mines)

Reel 1 shows receiving and testing of magnet steel and other raw material, machining, drilling, and finishing of the base, winding of shunt magnet, and partial assembly of meter. Reel 2 shows making of permanent magnets, bearing screws, testing and polishing of jewel bearings, making and assembling dial parts, and complete assembling, testing, and shipment of meters. Reel 3 shows assembling of different types of meters and their use on railway, railroad, mine locomotives, trucks, steamships, and submarines.

STORY OF V-TYPE CYLINDER MOTOR.....3 Reels (Courtesy of U. S. Bureau of Mines)

Reel 1 shows casting and machining of crank case and cylinder block, forging of crank shaft and cam shaft, and the minute inspections they must pass. Reel 2 shows assembling of engine, exhaust and intake manifold, oiling system, preparation of connection-rod bearing, tests to determine accuracy, and also the tests of assembled engine for smooth and quiet operation. Reel 3 shows how front-wheel brakes and steering gear work, assembling of chassis, building of body, and the completed machine.

STORY OF A STORAGE BATTERY.....2 Reels (Courtesy of U. S. Bureau of Mines)

Reel 1 shows some of the uses of a storage battery—automobile starting and lighting, farmhouse lighting systems, and radio; manufacture of the battery—pouring of lead for the grid, mixing of oxides and testing them for purity and density, coating and drying the plates, molding of plate straps and connectors, automatic welding of connections; and preparation and placing of insulators. Reel 2 shows inspection of plates and testing of rubber cases for leaks, making of wooden cases for batteries, assembling and sealing of cells in case, and welding of cell connectors. Shows making farm lighting batteries, and packing and shipping of batteries “bone dry.” An animated drawing shows how the specific gravity of the electrolyte in a battery goes up and down as a battery is charged and discharged. Shows how electrolyte is added to a new battery and proper care of a battery.

STORY OF A SPARK PLUG.....2 Reels (Courtesy of U. S. Bureau of Mines)

Reel 1 shows operation and use of spark plugs in gasoline engines, in fire trucks, airplanes, motor boats, and tractors. The action of a spark plug in a cylinder and the value of a good insulator are shown by animated photography. Reel 1 also shows quarrying of sillimanite, from which the insulator of a spark plug is made. In the Inyo mountains, its transportation by a donkey, motor truck, and rail, and the grinding and pulverizing of the ore, removal of moisture by filtering, ageing of the filter cakes, and the passing of the material through pugging machines. Reel 2 shows the insulators being machined to proper shape on turning machines, glazed and baked in tunnel

kilns, and the completed insulators subjected to a heat and chill test, a pull test of 1,300 pounds, and an electrical test of 1,500 volts. The reel also shows the making of the brass caps and electrodes, assembling, point setting, and packing, and gives suggestions on the proper operation of spark plugs.

STORY OF POWER 3 Reels
(Courtesy of U. S. Bureau of Mines)

Reel 1 shows the early development of the steam engine, a street scene in London, and Stephenson's locomotive, "The Rocket." It also shows modern uses of electricity, giant electromagnets, street and sign lighting, and electric locomotive. A map shows the distance power is transmitted from the Big Creek power plant in the Sierra Nevada Mountains in California. Animated photography shows how Faraday discovered that alternating current was produced by rotating a magnet between two coils of wire. The reel shows how power to turn the magnet is derived from steam and falling water. Reel 2 shows Niagara Falls and compares it with the fall of water at Big Creek, a total of 2,062 feet or more than 12 times the height of Niagara, and a view of the plant at Big Creek; also the power plant and dam on the Mississippi River at Keokuk, Iowa, where a large volume of water falls a short distance. A map shows the distribution of the water power resources in the U. S. and of the coal fields, the latter underlying 500,000 square miles of land. Improvements made in the steam engines are shown, and the working of a steam turbine is shown by animated photography. Reel 3 shows the building of a power plant for the Edison Electric Illuminating Co., of Boston, which generated 400,000 horsepower of electric energy. It also shows the units of power obtained per pound of coal from 1885 to 1925.

THROUGH LIFE'S WINDOWS (For description see page 6) 1 Reel
WATER POWER 1 Reel
(Courtesy of U. S. Bureau of Mines)

This film shows how the tremendous power of Niagara is changed into electrical energy, shows many modern uses of electricity in the home and in industries, also how melting snow in the mountains and small brooks and streams is used to generate electricity.

SECTION II.

ELEMENTARY GRADES DIVISION

CLASSIFICATION OF FILMS BY GRADES AND SUBJECT

GEOGRAPHY

Grade 4A

- Scenes in Old New York (1)
- Uses of Gas in New York City Industries (1)

Grade 4B

- Adventures Near the South Pole (6)
- Alaskan Eskimos at Home (1)
- All Aboard for India (2)
- Along the River Nile (5)
- Animals of India (2)
- Apes and Horses at the Zoo (1)
- Bare Facts About Bears (1)
- Beautiful Rivers of Australia (1)
- Frontiers of a Forbidden Land (China) (3)
- Ganges Valley (1)
- Glimpses of Sydney (1)
- Hopi Indians of the Southwest (4)
- Hunting Kangaroos in Australia (½)
- Japan (3)
- Life in the Frozen North (3)
- Merin, the Nomad (China and Mongolia) (4)
- Nanook of the North (6)
- Noo-ka-ping-wa (2)
- Paris (4)
- Pueblo Indians of the Southwest (4)
- Trailing Wild Animals in Africa (7)
- True North (8)

Grade 5A

- Alaskan Eskimos at Home (1)
- Apples of Annapolis (1)
- Better Milk (1)
- Bird and Animal Life of Yellowstone (1)
- City of Loyalists (St. John) (1)
- Digging Up the Past (1)
- Floods of Fortune (1)
- Forest Axiom (1)
- Forest Guardian (1)
- From Forest to Newsboy (1)

Harvest of the Sugar Maple Tree (1)
 Hopi Indians of the Southwest (4)
 Hunting Grounds of Hiawatha (1)
 Indians of the Northwest (2)
 Ivan the Great—the Alaskan Brown Bear (2)
 Life in the Frozen North (3)
 Lumbering in British Columbia (1)
 Lumbering in Eastern Canada (1)
 Manufacture of Illuminating Gas (1)
 Minnesota Bird Life (1)
 Money Making Industry (1)
 Mountaineering Memories (1)
 Nanook of the North (6)
 Natural Wonders and Game of Yellowstone (2)
 Niagara Falls (1)
 Noo-ka-ping-wa (2)
 Panama Canal (1)
 Power of Clouds (1)
 Pueblo Indians of the Southwest (4)
 Salmon Angling on the Restigouche River (1)
 Science in the Home (Matches) (1)
 Staff of Life (Wheat) (1)
 Storm and Surf at Bar Harbor (1)
 Story of a Can of Salmon (1)
 Suwanee River (1)
 Through the Norway of America (1)
 Towering Wonders of Utah (1)
 True North (8)
 Where Beauty Dwells (1)
 Wonderful Work of Water (1)
 Story of Coal (3)
 Story of Copper Mining (5)
 Story of Lead Mining and Milling (3)

Grade 5B

Better Milk (1)
 Bird and Animal Life of Yellowstone (1)
 Forest Axiom (1)
 Forest Guardian (1)
 From Forest to Newsboy (1)
 Hopi Indians of the Southwest (4)
 Hunting Grounds of Hiawatha (1)
 Insect Life Along Nature Trails (4)
 Manufacture of Illuminating Gas (1)
 Minnesota Bird Life (1)
 Natural Wonders and Game of Yellowstone (2)
 Niagara Falls (1)
 Old New York (1)

Our City—New York (3)
Power of Clouds (1)
Pueblo Indians of the Southwest (4)
Scenes in Old New York (1)
Science in the Home (Matches) (1)
Staff of Life (Wheat) (1)
Storm and Surf at Bar Harbor (1)
Story of Coal (3)
Story of Copper (5)
Story of Lead Mining and Milling (3)
Story of Sulphur (2)
Suwanee River (1)
Towering Wonders of Utah (1)
White-tailed Deer in its Native Haunts (1)
Wonderful Work of Water (1)

Grade 6A

Apples of Annapolis (1)
Bird Islands of Peru (4)
City of Loyalists (St. John) (1)
Coffee Industry in Brazil (1)
Digging Up the Past (1)
Ecuador (1)
Elephant Seals of Guadalupe Island (1)
Floods of Fortune (1)
From the land of the Incas (1)
Harvest of the Sugar Maple Tree (1)
Indians of the Northwest (2)
Jungle Joy Ride (1)
Life in the Frozen North (3)
Lumbering in British Columbia (1)
Lumbering in Eastern Canada (1)
Money Making Industry (1)
Mountaineering Memories (1)
Nanook of the North (6)
Northern Peru (1)
Salmon Angling on the Restigouche River (1)
Story of a Can of Salmon (1)
Through the Norway of America (1)

Grade 6B

Across the St. Gothard Alps (2)
The Basques (French Pyrenees) (1)
Lace Makers of Central France (2)
Normandy and Brittany (2)
Paris (4)
Perfume and Wine Industries of France (1)
Ports of France (1)

Scenes in Russia (1)

Through Oil lands of Europe and Africa—Germany, France, Spain, Morocco and Algeria (2).

Through Oil Lands of Europe—Italy, Hungary, the Danube and Rumania (3).

Through Oil Lands of Europe and Africa—Poland, Greece and Egypt (4).

Grade 7A

Alaskan Eskimos at Home (1)

Alaskan Moose (1)

Alaskan Sheep on the Home Range (1)

Better Milk (1)

Bird and Animal Life of Yellowstone (1)

Forest Axiom (1)

Forest Guardian (1)

From Forest to Newsboy (1)

Gem Cutting and Polishing (1)

History of Gas Lighting (1)

Hopi Indians of the Southwest (4)

Hunting Grounds of Hiawatha (1)

Magic Gems (1)

Manufacture of Illuminating Gas (1)

Minnesota Bird Life (1)

Natural Wonders and Game of Yellowstone (2)

Niagara Falls (1)

Old New York (1)

Our City—New York (3)

Panama Canal (1)

Play Safe (1)

Power of Clouds (1)

Pueblo Indians of the Southwest (4)

Scenes in Old New York (1)

Science in the Home (Matches) (1)

Staff of Life (Wheat) (1)

Storm and Surf at Bar Harbor (1)

Story of Coal (3)

Story of Copper (5)

Story of Lead Mining and Milling (3)

Story of Power (3)

Story of Sulphur (2)

Suwanee River (1)

Towering Wonders of Utah (1)

True North (8)

Water Power (1)

White-tailed Deer in its Native Haunts (1)

Wonderful Work of Water (1)

Grade 7B

Adventures Near the South Pole (6)

All Aboard for India (2)

Along the River Nile (5)
 Animals of India (2)
 Beautiful Rivers of Australia (1)
 Dragon Lizards of Komodo (5)
 Frontiers of a Forbidden Land (China) (3)
 Ganges Valley (1)
 Glimpses of Sydney (1)
 Hunting Kangaroos in Australia ($\frac{1}{2}$)
 Hunting Whales in Japan (1)
 Indian Elephant (1)
 Japan (3)
 Jenolan Caves of Australia (1)
 Kilauea's Lakes of Fire (1)
 Korea, the Hermit Kingdom (1)
 Merin, the Nomad (Mongolia) (4)
 New Norfolk and Derwent River (Tasmania) (1)
 Pearl Shell Industry (1)
 Savage Tribes of Borneo (4)
 Sheep and Cattle Raising in Australia (1)
 Timber Industry in Australia (1)
 Through Oil Lands of Europe and Africa—Germany, France, Spain, Morocco
 and Algeria (2).
 Through Oil Lands of Europe and Africa—Poland, Greece and Egypt (4).
 Trailing Wild Animals in Africa (7)
 Trip to Mount Buffalo (1)

Grade 8A

Crystal Formation ($\frac{1}{2}$)
 Kilauea's Lakes of Fire (1)
 Panama Canal (1)
 Power of Clouds (1)
 Storm and Surf at Bar Harbor (1)
 Water Power (1)
 Why of a Volcano (1)
 Wonderful Work of Water (1)

Grade 8B

All Aboard for India (2)
 Apples of Annapolis (1)
 Coffee Industry in Brazil (1)
 Floods of Fortune (Irrigation) (1)
 Forest Axiom (1)
 From Forest to Newsboy (1)
 Gem Cutting and Polishing ($\frac{1}{2}$)
 Glimpses of Sydney (1)
 Harvest of the Sugar Maple Tree (1)
 Lumbering in British Columbia (1)
 Lumbering in Eastern Canada (1)
 Money Making Industry (1)
 New Norfolk and Derwent River (Tasmania) (1)

Normandy and Brittany (2)
 Panama Canal (1)
 Pearl Shell Industry (1)
 Perfume and Wine Industries of France (1)
 Ports of France (1)
 Science in the Home (Matches) (1)
 Sheep and Cattle Raising in Australia (1)
 Staff of Life (Wheat) (1)
 Story of a Can of Salmon (1)
 Story of Coal (3)
 Story of Copper (5)
 Story of Sulphur (2)
 Through Oil Lands of Europe and Africa—Germany, France, Spain, Morocco
 and Algeria (2).
 Through Oil Lands of Europe—Italy, Hungary, the Danube and Rumania (3).
 Through Oil Lands of Europe and Africa—Poland, Greece and Egypt (4).
 Timber Industry in Australia (1)
 Uses of Gas in New York City Industries (1)

HISTORY

Grade 4A

Old New York (1)
 Scenes in Old New York (1)

Grade 4B

Columbus (4)

Grade 5A

Jamestown (4)
 Peter Stuyvesant (3)
 Pilgrims (3)
 Puritans (3)

Grade 5B

Benjamin Franklin (1)
 Declaration of Independence (3)
 Eve of the Revolution (3)
 Frontier Woman (3)
 Gateway to the West (3)
 George Washington (1)
 Vincennes (3)
 Wolfe and Montcalm (3)
 Yorktown (3)

Grade 6A

Alexander Hamilton (3)
 Benjamin Franklin (1)
 Daniel Boone (3)
 Frontier Woman (3)
 George Washington (1)

Old New York (1)
Scenes in Old New York (1)

Grade 6B

Dixie (3)
Old New York (1)
Panama Canal (1)
Scenes in Old New York (1)

Grade 7A

INVENTIONS AND DISCOVERIES

From Forest to Newsboy (1)
Panama Canal (1)
Scenes in Old New York (Clermont) (1)
Science in the Home (Matches) (1)

SANITATION AND HYGIENE

Bending the Twig (1)
Better Milk (1)
First Aid in the Home (1)

Grade 7B

Benjamin Franklin (1)
Daniel Boone (3)
Declaration of Independence (3)
Eve of the Revolution (3)
Frontier Woman (3)
Gateway to the West (3)
George Washington (1)
Jamestown (4)
Peter Stuyvesant (3)
Pilgrims (3)
Puritans (3)
Vincennes (3)
Wolfe and Montcalm (3)
Yorktown (3)

Grade 8A

Alexander Hamilton (3)
Benjamin Franklin (1)
Daniel Boone (3)
Dixie (3)
George Washington (1)
Panama Canal (1)
Scenes in Old New York (1)

Grade 8B

Making of an American (1)
Panama Canal (1)
Scenes in Old New York (Clermont) (1)

CIVICS AND EDUCATION

Bending the Twig (1)
Better Milk (1)
Dental Hygiene (2)
First Aid in the Home (1)
Forest Guardian (1)
Making of an American (1)
Our City—New York (3)
Priceless Gift of Health (1)

DOMESTIC SCIENCE

Apples of Annapolis (1)
Bending the Twig (1)
Better Milk (1)
Harvest of the Sugar Maple Tree (1)
Lace Makers of Central France (2)
Modern Gas Appliances for the Home (1)
Priceless Gift of Health (1)
Staff of Life (Wheat) (1)
Story of a Can of Salmon (1)

LITERATURE

Benjamin Franklin (1)
Hiawatha (4)
Hunting Grounds of Hiawatha (1)

NATURE STUDY

Lower Grades—1A—4B

Adventures of a Gray Squirrel (1)
Adventures Near the South Pole (6)
Alaskan Eskimos at Home (1)
Alaskan Moose (1)
Animals of India (2)
Apes and Horses at the Zoo (1)
Bare Facts About Bears (1)
Beasts of Prey (1)
Bending the Twig (1)
Bobby's Ark (1)
Dental Hygiene (2)
Dwellers of the Deep (1)
Indian Elephant (1)
Nanook of the North (6)
Noo-ka-ping-wa (2)
Rare Animals and the Tale of the Hare and the Tortoise (1)
Seeds and Seed Dispersal (1)
Toad Traits (1)
Wild Babies (1)

Higher Grades—5A—6B

Adventures of a Gray Squirrel (1)
Adventures Near the South Pole (6)
Alaskan Eskimos at Home (1)
Alaskan Moose (1)
Alaskan Sheep on the Home Range (1)
An Adventure in Tripoli ($\frac{1}{2}$)
Animals of India (2)
Animals That Lived When the World was Young ($\frac{1}{3}$)
Apes and Horses at the Zoo (1)
Bare Facts About Bears (1)
Beasts of Prey (1)
Better Milk (1)
Bird and Animal Life of Yellowstone (1)
Bird Islands of Peru (4)
Chick Hatching from Shell ($\frac{1}{3}$)
Crystal Formation ($\frac{1}{2}$)
Cuckoo's Secret (1)
Depths of the Sea (4)
Digging Up the Past (1)
Dragon Lizards of Komodo (5)
Duck-billed Platypus of Australia (1)
Dwellers of the Deep (1)
Elephant Seals of Guadalupe Island (1)
Feathers (1)
First Aid in the Home (1)
Forest Axiom (1)
Forest Guardian (1)
Frogland ($\frac{1}{3}$)
From Forest to Newsboy (1)
Giant in Fairyland ($\frac{1}{2}$)
Harvest of the Sugar Maple Tree (1)
Hiawatha (4)
How Queen Bees Duel to Death ($\frac{1}{4}$)
Hunting Kangaroos in Australia ($\frac{1}{2}$)
Hunting Whales in Japan (1)
Indian Elephant (1)
Insect Life Along Nature Trails (4)
Ivan the Great—Alaskan Brown Bear (2)
Knives and Forks of the Animal Kingdom ($\frac{1}{4}$)
Life History of Duck Hawk (1)
Life History of Pearl (1)
Life History of a Silkworm (1)
Magic Gems (1)
Minnesota Bird Life (1)
Modern Miracle Worker (1)
Mountaineering Memories (1)
Nanook of the North (6)

Natural Wonders and Game of Yellowstone (2)
 Noo-ka-ping-wa (2)
 Pearl Shell Industry (1)
 Pirates of the Air (1)
 Power of Clouds (1)
 Priceless Gift of Health (1)
 Race of the Ages ($\frac{1}{2}$)
 Rare Animals and the Tale of the Hare and the Tortoise (1)
 Salmon Angling on the Restigouche River (1)
 Seed and Seed Dispersal (1)
 Seeing the Unseen (1)
 Snowy Egret (1)
 Staff of Life (Wheat) (1)
 Storm and Surf at Bar Harbor (1)
 Through Life's Windows (1)
 Toad Traits (1)
 Trailing Wild Animals in Africa (7)
 Tree Sloth's Great-Great-Grandmother (1)
 True North (8)
 Where Did you Get Your Face? (1)
 White-tailed Deer in His Native Haunts (1)
 Why of a Volcano (1)
 Wonderful Work of Water (1)

HIGH SCHOOL DIVISION

CLASSIFICATION OF FILMS ACCORDING TO SUBJECT

BIOLOGY

Alaskan Moose (1)
An Adventure in Tripoli ($\frac{1}{2}$)
Animals of India (2)
Animals That Lived When the World was Young ($\frac{1}{3}$)
Apes and Horses at the Zoo (1)
Bare Facts About Bears (1)
Bending the Twig (1)
Beasts of Prey (1)
Better Milk (1)
Bird and Animal Life of Yellowstone (1)
Bird Islands of Peru (4)
Chick Hatching from Shell ($\frac{1}{3}$)
Circulation in Embryo Chick (1)
Cuckoo's Secret (1)
Depths of the Sea (4)
Digging Up the Past (1)
Dragon Lizards of Komodo (5)
Duck-billed Platypus of Australia (1)
Dwellers of the Deep (1)
Elephant Seals of Guadalupe Island (1)
Feathers (1)
Forest Axiom (1)
Forest Guardian (1)
Frogland ($\frac{1}{3}$)
From Forest to Newsboy (1)
Gray Squirrel (1)
How Life Begins (4)
How Queen Bees Duel to Death ($\frac{1}{4}$)
Hunting Kangaroos in Australia ($\frac{1}{2}$)
Hunting Whales in Japan (1)
Indian Elephant (1)
Insect Life Along Nature Trails (4)
Knives and Forks of the Animal Kingdom ($\frac{1}{4}$)
Life Cycle of an Oyster (1)
Life History of the Duck Hawk (1)
Life History of the Pearl (1)
Life History of the Silkworm (1)
Minnesota Bird Life (1)
Pirates of the Air (1)
Priceless Gift of Health (1)

Protozoa and Hydroids (1)
Rare Animals and the Tale of the Hare and the Tortoise (1)
Seeds and Seed Dispersal (1)
Seeing the Unseen (1)
Snowy Egret (1)
Through Life's Windows (1)
Toad Traits (1)
Trailing Wild Animals in Africa (7)
Tree Sloth's Great-Great-Grandmother (1)
Where Did Yow Get Your Face? ($\frac{1}{2}$)

CHEMISTRY

Crystal Formation ($\frac{1}{2}$)
Manufacture of Illuminating Gas (1)
Story of Abrasives (4)
Story of Alloy Steel (4)
Story of Asbestos (3)
Story of Coal (3)
Story of Copper (10)
Story of Dynamite (2)
Story of Fire Clay Refractories (4)
Story of Gasoline (3)
Story of Heat Treatment of Steel (2)
Story of Lead Mining and Milling (3)
Story of Lead Smelting (2)
Story of Lubricating Oil (2)
Story of Petroleum (4)
Story of Sulphur (2)

CIVICS AND EDUCATION

Forest Guardian (1)
Making of An American (1)
Money Making Industry (1)
Our City—New York (3)
Priceless Gift of Health (1)
Play Safe (1)

COMMERCIAL GEOGRAPHY

All Aboard for India (2)
Apples of Annapolis (1)
Coffee Industry in Brazil (1)
Floods of Fortune (1)
Forest Axiom (1)
From Forest to Newsboy (1)
Glimpses of Sydney (1)
Harvest of the Sugar Maple Tree (1)
Lumbering in British Columbia (1)
Lumbering in Eastern Canada (1)
Manufacture of Illuminating Gas (1)

Money Making Industry (1)
 New Norfolk and Derwent River (1)
 Normandy and Brittany (2)
 Panama Canal (1)
 Pearl Shell Industry (1)
 Perfume and Wine Industries of France (1)
 Ports of France (1)
 Scenes in Russia (1)
 Science in the Home (Matches) (1)
 Sheep and Cattle Raising in Australia (1)
 Staff of Life (Wheat) (1)
 Story of a Can of Salmon (1)
 Story of Abrasives (4)
 Story of Coal (3)
 Story of Copper Mining (5)
 Story of Dynamite (2)
 Story of Gasoline (3)
 Story of Sulphur (2)
 Through Oil Lands of Europe and Africa—Germany, France, Spain, Morocco
 and Algeria (2).
 Through Oil Lands of Europe—Italy, Hungary, the Danube and Rumania (3)
 Through Oil Lands of Europe and Africa—Poland, Greece and Egypt (4).

GENERAL SCIENCE

Crystal Formation ($\frac{1}{2}$)
 Digging Up the Past (1)
 Floods of Fortune (1)
 Forest Axiom (1)
 Forest Guardian (1)
 From Forest to Newsboy (1)
 Gem Cutting and Polishing ($\frac{1}{2}$)
 Giant in Fairyland ($\frac{1}{2}$)
 Jenolan Caves of Australia (1)
 Kilauea's Lakes of Fire (1)
 Life History of the Silkworm (1)
 Magic Gems (1)
 Money Making Industry (1)
 Pearl Shell Industry (1)
 Play Safe (1)
 Power of Clouds (1)
 Science in the Home (Matches) (1)
 Seeing the Unseen (1)
 Story of Coal (3)
 Story of Copper (5)
 Through Oil Lands of Europe and Africa—Germany, France, Spain, Morocco
 and Algeria (2).
 Through Oil Lands of Europe—Italy, Hungary, the Danube and Rumania (3).
 Through Oil Lands of Europe and Africa—Poland, Greece and Egypt (4).

Tree Sloth's Great-Great-Grandmother (1)
Uses of Gas in New York City Industries (1)
Water Power (1)
Wonderful Work of Water (1)

HYGIENE

Bending the Twig (1)
Better Milk (1)
Dental Hygiene (2)
First Aid in the Home (1)
Priceless Gift of Health (1)
Through Life's Windows (1)

GEOLOGY AND PHYSIOGRAPHY

Across St. Gothard Alps (2)
Crystal Formation ($\frac{1}{2}$)
Gem Cutting and Polishing ($\frac{1}{2}$)
Jenolan Caves of Australia (1)
Kilauea's Lakes of Fire (1)
Magic Gems (1)
Niagara Falls (1)
Power of Clouds (1)
Storm and Surf at Bar Harbor (1)
Story of Coal (3)
Story of Copper (5)
Story of Petroleum (4)
Towering Wonders of Utah (1)
Where Beauty Dwells (1)
Why of a Volcano (1)
Wonderful Work of Water (1)

AMERICAN HISTORY

Alexander Hamilton (3)
Benjamin Franklin (1)
Columbus (4)
Daniel Boone (3)
Declaration of Independence (3)
Dixie (4)
Eve of the Revolution (3)
Frontier Woman (3)
Gateway to the West (3)
George Washington (1)
Jamestown (4)
Old New York (1)
Peter Stuyvesant (3)
Pilgrims (3)
Puritans (3)
Scenes in Old New York (1)

Vincennes (3)
Wolfe and Montcalm (3)
Yorktown (3)

PHYSICS

Story of an Electric Meter (3)
Story of a V-type Cylinder Motor (3)
Story of a Storage Battery (2)
Story of a Spark Plug (2)
Story of Power (3)
Through Life's Windows (1)
Water Power (1)

MODERN LANGUAGES

Across the St. Gothard Alps (2)
The Basques (1)
Normandy and Brittany (2)
Paris (4)
Perfume and Wine Industries of France (1)
Ports of France (1)

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